FINAL Environmental Impact Statement (FEIS)
and
Regulatory Impact Review

FEDERAL LOBSTER MANAGEMENT IN THE EXCLUSIVE ECONOMIC ZONE

National Marine Fisheries Service
Northeast Region

May 10, 1999

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

MAY 21 1999

Dear Reviewer:

In accordance with provisions of the National Environmental Policy Act of 1969, we enclose for your review our final environmental impact statement on Federal Lobster Management in the Exclusive Economic Zone (EEZ).

The subject action would transfer federal legislative authority for management of American lobster from the Magnuson-Stevens Act to the Atlantic Coastal Fisheries Cooperative Management Act; continue current lobster regulations; extend an EEZ moratorium on new entrants into the lobster fishery; implement a lobster area management and trap tag program; establish a cap on fishing effort in the nearshore and offshore EEZ during 1999-2000; and annually to end overfishing and rebuild lobster stocks in partnership with the Atlantic States Marine Fisheries Commission, the states, and the lobster industry.

Any written comments or questions you may have should be submitted to Robert Ross, Northeast Regional Office, National Marine Fisheries Service, One Blackburn Drive, Gloucester, Massachusetts 01930, by June 28, 1999. Also, one copy of your comments should be sent to me in room 6117, PSP, U.S. Department of Commerce, Washington, D.C. 20230.

Sincerely,

Margaret R. McCall

for Susan Fruchter
Acting NEPA Coordinator

Enclosure

I. INTRODUCTION

American lobsters are overfished throughout their range, from Canada to Cape Hatteras. Although both landings and population abundance are at an all-time high, there is significant risk of a sharp decline in abundance, and therefore landings. Such a decline would have serious implications for the American lobster fishery, which is the most valuable fishery in the northeastern United States.

In 1996, the stock assessment of lobsters prepared by regional scientists was reviewed by an international panel of stock assessment experts who agreed with the regional conclusions about stock abundance, egg production, and risk of collapse. Abundance is high throughout the range, probably because of unusually favorable environmental conditions for egg and larval survival and growth. Although individual lobsters are numerous, both the fishery and the stock depend on females at the minimum legal carapace size of 3-1/4 inches. This is an extremely precarious situation since most lobsters at this size have not yet reproduced. Other crustacean fisheries have exhibited similar high abundance, and equally dramatic declines when egg and larval survival and growth return to more typical numbers.

The lobster resource occurs inshore and offshore, with most of the fishery (about 80%) taking place in state waters (within three miles of the coast). The fishery in offshore waters has developed in recent years and includes both expansion of the inshore fishery to nearshore Federal waters and a deepwater offshore fishery that occurs farther from shore. There are presently about 3,400 Federal lobster permits, about 900 of which are for trawl gear.

The inshore fishery in state waters is managed through an interstate plan developed by the Atlantic States Marine Fisheries Commission (Commission). That body can also recommend actions for Federal waters adjacent to state waters under provisions of the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA). The Federal lobster fishery is presently managed under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (50 CFR Part 649) and the ACFCMA (50 CFR Part 697).

The intent of these regulations is, in combination with state regulations governing the American lobster fishery in non-Federal waters, to end overfishing and rebuild stocks of American lobsters. NMFS proposes to withdraw existing lobster management regulations issued under the authority of the MSA, and to implement them and a variety of new measures, under regulations issued under the authority of the ACFCMA. The Sustainable Fisheries Act (SFA), approved in 1996, requires NMFS to ensure that plans to end overfishing and rebuild stocks are in place for all overfished resources by June 1999.

Both Federal and Commission managers agree that lobsters would be managed more effectively through an interstate plan under ACFCMA. The Commission approved Amendment 3 to the American Lobster Interstate Fishery Management Plan (ISFMP) in December 1997. The goal of Amendment 3 is to have a healthy lobster resource and a management regime that provides for a

sustained harvest of lobsters, maintains appropriate opportunities for participation, and provides for cooperative development of conservation measures by all stakeholders. Amendment 3 includes recommended measures in Federal waters as well as in state waters (specific measures are described later in this document), and it establishes a procedure whereby fishermen, including some who fish exclusively in Federal waters, may make recommendations for further management measures to meet predefined targets designed to end overfishing and to facilitate stock rebuilding.

NMFS published a Draft Environmental Impact Statement (DEIS) on March 27, 1998, (63 FR 14922) that presented several lobster management alternatives for both the trap and the non-trap sector of the fishery. The DEIS recognized the dilemma the Federal government faces in managing American lobster under the MSA, given that approximately 80 percent of the American lobster fishery occurs in state waters and is subject primarily to state, not Federal, management measures. A Proposed Rule, based on public comments addressing the DEIS, was published on January 15, 1999 (64 FR 2710).

II. PURPOSE AND NEED FOR ACTION

1. Background

- **Federal Lobster Management**

In 1978, the lobster producing states of Maine through North Carolina and NMFS cooperated under the auspices of the NMFS State-Federal Fishery Management Program (precursor to the Commission's Interstate Fishery Management Program) to develop a fishery management plan and provide a unified approach to management of the lobster fishery. Although there was no legislative authority for implementing American lobster management decisions under the Program, state and Federal fishery management agencies, through the Program's Northeast Management Board, agreed to work toward attainment of the following management goals:

- Develop structure of institutional arrangements for effective regionalized management of lobster stocks that occur within two or more political jurisdictions
- Coordinate the collection/analysis of statistical and scientific data
- Promote efficiency in harvesting and utilization
- Develop/maintain a healthy commercial fishery
- Maintain opportunities for participation in lobster recreational fishing

Similarly, the associated ISFMP management objectives were to:

- Adjust minimum size limit on basis of best scientific information
- Develop regional program to control fishing effort and regulate fishing mortality rates

- Implement uniform collection, analysis, and dissemination of biological/economic data
- Increase brood stock abundance to minimize risk of stock depletion and recruitment failure
- Minimize lobster injury and mortality associated with fishing
- Standardize gear-marking to extent practicable
- Maintain existing social and cultural features of the industry whenever possible

The ISFMP's recommended management measures were to:

- Require escape vents in fixed lobster gear
- Mark all pots/traps with owner identification number issued by licensing agency
- Develop appropriate restrictions and requirements on use of fixed lobster gear within the Exclusive Economic Zone (EEZ) (marine waters under Federal jurisdiction)
- Require minimum size of 3-3/16 inches carapace length, and study socio-economic impacts of increased minimum size
- Prohibit possession of egg-bearing ("berried") lobsters and female lobsters from which external eggs have been removed
- License dealers by state of landing
- License fishermen or vessels by state of harvest and/or landing
- Require annual Federal or state-issued license for harvest in the EEZ
- Establish maximum number of annual licenses/permits, at option of licensing agency
- Prohibit possession of shucked lobster aboard vessels

In November 1978, the Northeast Fisheries Management Board referred the ISFMP to the New England Fishery Management Council (Council) for implementation of recommended management measures in Federal waters under the provisions of the Magnuson Fishery Conservation and Management Act (recently renamed the MSA). Concurrently, the members of the Board expressed commitment toward achieving the ISFMP objectives and associated management measures in waters under jurisdiction of the respective states.

The Council's Fishery Management Plan for the American Lobster Fishery was implemented in Federal waters and for vessels with Federal fishing permits in 1983. Primary initial management measures included the establishment of a minimum carapace length of 3 3/16 inches; prohibition on possession of egg-bearing lobsters; and requirement of trap escape vents in fixed lobster gear. Subsequent to approval, seven amendments to the FMP have been developed during the last 15 years:

Amendment 1 was approved in 1986, and established uniform offshore lobster fishing gear marking restrictions to reduce gear conflicts and regulatory exemption for the red crab fishery from lobster gear regulatory requirements.

Amendment 2 was implemented in 1987 and increased minimum size requirements by 1/32 inch increments in four steps over a 5-year period, intended to reach 3-5/16 inches by January 1992.

Amendment 3 in 1990 required all lobster traps to contain biodegradable escape panels.

Amendment 4 in 1991 reduced minimum size to 3-1/4 inches, delayed further increases, and modified minimum dimensions of escape vent requirements.

Amendment 5 in 1994 imposed a 5-year moratorium on new entrants in the EEZ lobster fishery via a limited access permit system. This amendment also charged Effort Management Teams (EMT), in collaboration with industry representatives, to develop detailed plans by July 1995 to control effort and rebuild overfished lobster stocks. In addition, it maintained lobster minimum size at 3-1/4 inches; established permit requirements for vessel operators and dealers; and revised the overfishing definition.

The deadline for the Council's adoption of plans submitted by the EMTs was not met. The Council did not reach final agreement on specific measures, such as effort reduction and limited entry, to prevent overfishing due largely to the hesitancy of state jurisdictional authorities to commit to the fishing mortality reduction goals of Amendment 5 and to assist in the administration, cost, or enforcement of the proposed area measures.

Amendment 6, approved in 1997, provides a framework for abbreviated rulemaking procedures to address gear conflicts.

Amendment 7, approved in March, 1999, provided regulatory consistency on vessel permitting by facilitating transactions such as buying, selling, replacing or upgrading commercial fishing vessels issued limited access permits.

A complete summary of current lobster regulations under the NEFMC's FMP can be found in 50 CFR Part 649, and at the NMFS Northeast Region Internet site: http://www.nero.nmfs.gov/doc/nero.html.

In September 1995, NMFS issued an Advance Notice of Proposed Rulemaking (ANPR) seeking public comments on options for lobster management. The two options were: 1) withdrawing the Council FMP, transferring Federal authority to the ACFCMA, and 2) preparing a Secretarial amendment to the Council FMP. In February 1996, NMFS Northeast Regional Administrator advised the New England Council of NMFS' intent to withdraw Secretarial approval of the Council FMP and transfer necessary Federal regulations to the ACFCMA, on the basis of Federal Regulatory Reform. Subsequently, in March 1996, NMFS issued a Proposed Rule announcing initial determination to withdraw the Lobster FMP under the Magnuson Act, predicated partially on changed circumstances calling into question whether the FMP is consistent with the National Standard 1 (which requires implementation of conservation and management measures to prevent overfishing) and National Standard 7 (which requires that conservation and management measures

shall minimize costs and avoid unnecessary duplication). The Proposed Rule emphasized that final FMP withdrawal and implementing regulations would occur only on completion of an effective state management program. In July 1996, the Commission prepared a Public Information Document which acknowledged the basis for lead lobster management shifting to the Commission due to the predominance of lobster landings in state waters and the management flexibility offered by the ACFCMA.

On October 11, 1996, the SFA amended the ACFCMA by adding Section 810 which provides that if no regulations have been issued under Section 804(b) (see Section III.1) of ACFCMA by December 31, 1997, to implement a coastal Fishery Management Plan (CFMP) for American lobster, the Secretary shall issue interim regulations before March 1, 1998, that will prohibit any vessel that takes lobsters in the EEZ by a method other than pots or traps from landing lobsters (or any parts thereof) at any location within the United States in excess of:

(1) 100 lobsters (or parts thereof) for each fishing trip of a 24-hour or less duration (up to a maximum of 500 lobsters, or parts thereof, during any 5-day period); or
(2) 500 lobsters (or parts thereof) for a fishing trip of 5 days or longer.

NMFS developed an Environmental Assessment and issued an Interim Final Rule which became effective March 1, 1998 (63 FR 10154, dated March 2, 1998), to implement this landing prohibition as specified in the SFA.

In addition, the SFA amended Section 307 of the MSA to make it unlawful for any person to ship, transport, sell or purchase, in interstate or foreign commerce, any whole live lobster that is smaller than the minimum possession size in effect under either the MSA or the ACFCMA. The legislation also amended the ACFCMA and provided authorization to allow vessels that possess lobster permits issued by the State of Maine to fish in areas of the EEZ known as Maine pocket waters. The SFA also required NMFS to identify annually all overfished fisheries within the jurisdictions of fishery management councils, that fishery management councils submit FMPs or amendments to FMPs to end overfishing, and to rebuild overfished stocks by September 30, 1998. (On September 30, 1997, NMFS issued its list of overfished fisheries, which includes the American lobster fishery). In October, 1998, NMFS informed the Council that it was the intent of NMFS to transfer Federal regulatory authority for American lobster from the MSA to the ACFCMA. The ACFCMA, under Section 804(b) of the Act, authorizes the Federal government in the absence of FMP regulations under the M-SA, to implement regulations to govern fishing in the EEZ that are 1) compatible with the effective implementation of a Commission ISFMP; and 2) consistent with the national standards set forth in Section 301 of the MSA. Because the majority of the lobster fishery takes place in state waters (80%), the expectation is that Federal management action under the ACFCMA is the most risk-averse determination, and is most likely to encourage and expedite partnership management in state and Federal jurisdictional waters in a time frame which minimizes the potential for a stock collapse of the resource throughout its range. The SFA further required that if a council does not submit a required FMP or amendment to end overfishing by the deadline, the Secretary shall prepare the required resource measures

within a nine-month time frame (by June 1999).

On October 22, 1997, NMFS issued a Notice of Intent (62 FR 54834) to prepare an Environmental Impact Statement (EIS) to assess the impact of Federal management measures for lobster under the ACFCMA. The Notice provided a 30 day comment period which ran from October 22 - November 20, 1997. The following seven comments were received during the public comment period on the Notice of Intent to prepare this draft EIS:

> Two fishing associations, the Environmental Defense Fund, the Cape Cod Group of the Sierra Club, the City of Gloucester Fisheries Commission, Safer Water in Massachusetts (SWIM), and one individual submitted comments. Two comments addressed the inadequacy of current lobster management and the specific need to take timely action in the control and/or reduction of lobster fishing effort. Four comments concerned the nature and/or inequity of existing or proposed management measures concerning the non-trap fishery. One comment favored a proposed trap limit based upon historical participation in the fishery, one comment favored a uniform trap limit for all fishermen, and a third comment preferred consideration of whatever approach would maintain the economic viability of the respective gear sectors. Four comments favored an increase in the legal minimum carapace length for lobster and two favored a maximum size regulation. Other favored and/or preferred management measures include "days off" from the fishery; prohibition on landing of lobster during the molting season; prohibition on landing of female lobsters for one month during the peak egg-out period; reexamination and/or continuation of the EEZ lobster fishery moratorium on new entrants; an increase in lobster gear minimum vent size; and use of no-take reserve (buffer) areas. One comment provided a suggested allocation of maximum allowable trap limits on the basis of historical landings, vessel length, and/or income derived from lobster fishing. Another comment expressed concern regarding the costs and number of personnel which would be required to monitor a Federal trap tag program. Three comments stressed the need to involve fishermen in lobster management decisions and/or the need to identify a greater variety of management techniques to conserve the resource and retain the economic viability of the industry. The above comments were considered and addressed in the development of management alternatives presented in the DEIS.
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> A final comment category concerned needed research. The recommended research topics included investigations on lobster migration and population biology; the influence of inshore pollution and habitat degradation as a density-dependent source of lobster mortality; and the effects of sewage outfall on lobster larvae and habitat.

A Draft Environmental Impact Statement and Regulatory Impact Review (DEIS/RIR) was published on February 6, 1998 (63 FR 6179), and withdrawn on February 20, 1998 (63 FR 8634), in order to give NMFS more time to further address the concerns of the Commission and northeastern states over the compatibility of alternatives for management of American lobster in

Federal waters with the Commission's Amendment 3 to the ISFMP for lobster. A revised DEIS/RIR was published on March 27, 1998 (63 FR 14922) that incorporates NMFS' response to those concerns.

The DEIS/RIR presented several alternative lobster management measures for both the trap and the non-trap sector of the fishery. Thirteen public hearings were held in nine states from Maine to North Carolina to discuss these alternatives and any other ideas about lobster management. Public comments were received from March 20 to May 19, 1998. Overall public comment on these alternatives indicated strong support for the plan embodied by the Commission's Amendment 3 and little support for other measures upon which NMFS sought comments. Specific responses to comments provided during the public comment period are provided in the Appendix.

A Proposed Rule addressing the public comments was subsequently published on January 15, 1999 (64 FR 2708) to retain all current Federal measures for the management of the lobster fishery, but to implement those measures by regulations issued under the authority of the ACFCMA instead of by the current regulations issued under the authority of the MSA. In addition, new measures will be implemented to complement state regulations under the provisions of the Commission's ISFMP and rebuild American lobster stocks. These management measures are described in Section III.

A previous EIS describing initial lobster management alternatives and associated environmental impacts was developed in March 1983, and a supplemental EIS was prepared in March 1994. Similar and related Environmental Assessments for FMP amendments were prepared in January 1986, June 1987, July 1989, August 1991, July 1996, and October, 1998.

As mandated by the Endangered Species Act of 1973 (ESA), NMFS must assess the impact of all Federal lobster management actions on endangered and threatened species of whales, sea turtles, and fish as well as any critical habitats designated for those species. The Marine Mammal Protection Act of 1972 (MMPA) requires NMFS to assess the level of impact of all U.S. fisheries on each marine mammal stock. NMFS has taken regulatory action under the authority of both the ESA and the MMPA for the purpose of marine mammal conservation. On April 4, 1997, NMFS issued MMPA emergency regulations restricting the lobster pot fishery to reduce entanglement risk to the endangered northern right whale. As required by the 1994 amendments to the MMPA, NMFS published a take reduction plan to reduce the impact of entanglements of four large whale species in four East Coast fisheries, including the lobster pot fishery. The interim final rule implementing the Atlantic Large Whale Take Reduction Plan (ALWTRP) was issued on July 22, 1997, with regulations affecting the lobster pot fishery effective November 15, 1997. The final rule implementing the ALWTRP was issued on February 16, 1999 (64 FR 7529), with regulations affecting the lobster pot fishery effective April 1, 1999. An overview of protected species management actions, in particular the final regulations implementing the ALWTRP impacting the lobster fishery is presented in Section III of the FEIS.

Pursuant to its responsibilities under Section 7 of the Endangered Species Act of 1973 (ESA), NMFS has conducted several ESA consultations on the lobster fishery as administered under the MSA in the American lobster fishery management plan. The December 13, 1996, consultation required that NMFS re-evaluate the impacts of the fishery if any right whale entanglements in lobster gear occurred. In June 1997, a right whale became entangled in the buoy line of an offshore lobster pot trawl. Therefore, the ESA Section 7 consultation was reinitiated. The consultation considered the following: 1) assessment of impacts from the final rule to withdraw the Federal lobster FMP from the MSA, 2) actions to transfer lobster management authority to regulations issued under the ACFCMA, and 3) new information on the status of endangered and threatened species under NMFS jurisdiction. The Section 7 consultation on current Federal action was concluded with a Biological Opinion issued on December 17, 1998. After reviewing the best available information on the status of endangered and threatened species under NMFS jurisdiction, the environmental baseline for the action area, the effects of the action, and the cumulative effects, it is NMFS' biological opinion that the continued operation of the Federal lobster fishery, with modification to reduce impacts of entanglement through the ALWTRP, may affect but is not likely to jeopardize the continued existence of the northern right whale, humpback whale, fin whale, blue whale, sperm whale, sei whale, leatherback sea turtle, and loggerhead sea turtle and is not likely to destroy or adversely modify critical habitat that has been designated for the northern right whale. NMFS anticipates that the new lobster management scheme may benefit right whales, as well as other protected species, by reducing the amount of lobster pot gear in the ocean and consequently reducing the risk of entanglement. The ALWTRP is designed to reduce the likelihood of serious injury or mortality of large whales resulting from entanglement to acceptable levels as defined by MMPA by April 3, 2001.

- **State Lobster Management**

The initial ISFMP developed in 1978 was adopted by the Commission for state waters and remains in effect. In 1990, Amendment 1 to that plan called for member states (Maine through North Carolina) to adjust lobster regulations in state waters to meet the minimum size requirements in place at that time for Federal waters. Amendment 2 to the ISFMP in 1995, again in accordance with the Council's plan for Federal waters, halted scheduled increases in minimum size, i.e., retaining the minimum size for lobsters in state waters at 3-1/4 inches carapace length, and prohibited chemical "scrubbing" to remove eggs from berried lobsters.

In December 1993, the ACFCMA was enacted to support and encourage the development, implementation, and enforcement of effective interstate conservation and management of Atlantic coastal fishery resources. The provisions of this legislation require the Commission to specify, in each coastal interstate fishery managment plan, the requirements necessary for States to be in compliance with the plan. In the event that one or more States have not effectively implemented the required management measures, the ACFCMA further requires the Commission to notify the Secretary of Commerce, who then must review the determination of noncompliance and take steps as necessary to conserve the resource, by implementing a moratorium on fishing for the species in question within the waters of the noncomplying state(s).

In 1994, the Commission, under the provisions of the ACFCMA, identified the following measures for mandatory State compliance under the Lobster ISFMP:

- 3-1/4 inch minimum size
- Prohibition on possession of berried or scrubbed lobsters/lobster meats/lobster parts
- Mandatory escape vents and escape panels with biodegradable fasteners
- Prohibition on spearing lobsters

The following ISFMP measures did not require mandatory compliance:

- Effort-control requirements
- Enforcement coordination
- V-notching of tail flipper of berried females
- Licensing of fishermen
- Fixed gear requirements

In September 1995, the Commission voted to proceed with Amendment 3 of the ISFMP to further address coordination between state and Federal lobster management regulations, including ways of controlling fishing effort to avoid overfishing of the lobster resource throughout its range. This Amendment (ASMFC 1997) was approved by the Commission in December 1997. Specifically, the ISFMP's management measures include, but are not limited to:

- Continuation of the 3-1/4 inch carapace length minimum size requirement;
- A maximum size limit (5 inch carapace length) in the inshore Gulf of Maine;
- Protection of V-notched lobsters;
- Required permitting of commercial fishermen who land or possess lobster;
- Gear (e.g., trap size) regulatory requirements;
- Prohibition on possession of lobster meats, detached tails, claws or other parts of lobster;
- Prohibition on spearing lobsters;
- Establishment of Lobster Conservation Management Teams (LCMT) to recommend conservation-equivalent management measures for each of seven management areas;
- Limits on lobster harvest by gear or methods other than traps; and
- For three of the seven lobster management areas, a three-year fishing effort reduction (contingent upon potential modification by approval of alternative LCMT conservation equivalent proposals), i.e., 1200 traps per vessel in 1998 to 800 traps per vessel in the year 2000, for three of the seven lobster management areas.

In the spring of 1998, in each of the seven lobster management areas identified in the ISFMP, LCMTs were formed to advise and make recommendations to the Commission on management measures necessary to restore egg production for the American lobster resource in each of the managment areas to greater than the overfishing definition. For each area, which submitted a LCMT management proposal, the recommended management measures were reviewed by the

Commission's Lobster Technical Committee based on their ability to achieve the egg production milestones for the year 2000. On October 27, 1998, the Commission's Lobster Management Board endorsed the initial proposals provided by four of the LCMTs, having already endorsed an initial proposal for one area plan in August, 1998. The proposals vary by management area, and each proposal included many of the following management measures: increasing the minimum gauge size, implementing a maximum gauge size, increasing the vent size, capping effort, limiting the number of traps per vessel, and area closures.

In February, 1999, the Commission's Lobster Management Board voted to take a selective list of management measures identified in the area proposals to public hearings during spring, 1999, as a draft Addendum 1 to Amendment 3 of the ISFMP. The Board also agreed to a June, 1999, target date for completing an updated stock assessment for the American lobster resource, with a peer review of the assessment expected to be completed by July, 1999. The Board voted to postpone further development of the area managment measures related to egg production until the stock assessment peer review is completed; provided that the Board will approve that component of the Addendum by December 31, 1999.

2. Objectives

The objective of American lobster management under this action are to end overfishing of lobster throughout the species' range and to rebuild lobster stocks to a level that will produce optimum yield. Since a majority of the lobster fishery (approximately 80%) takes place in waters under state jurisdiction, regulatory action in Federal waters alone, even a total moratorium on harvesting lobster, would not achieve these objectives. The intention of this action is also to establish an enhanced state-Federal management framework, in collaboration with the lobster industry, to comply with the national standards of the Magnuson-Stevens Act in a timeframe to minimize the potential of a stock collapse of the American lobster resource.

3. Need for Action

In 1997, the fishery for American lobster contributed 27% of the Northeast coastal states' revenue from commercial fishing, valued at $268 million and employed an estimated 50,000 individuals. Three stock areas for the American lobster have been defined: (1) Gulf of Maine; (2) Southern Cape Cod to Long Island Sound; and (3) Georges Bank and south to Cape Hatteras. The assessment for American lobster was reviewed during June 1993 at the NMFS Northeast Region's Stock Assessment Workshop No. 16 (SAW 16) and emphasized a need to reduce fishing mortality by 20% in the Gulf of Maine and by as much as 50% in Southern New England in order to end overfishing. Another stock assessment was conducted by state and Federal scientists during June 1996 (SAW 22) and concluded that the resource is overfished throughout its range, with a high risk of a sharp decline in abundance in all three stock assessment areas.

The American lobster resource is considered overfished when, throughout its range, the fishing

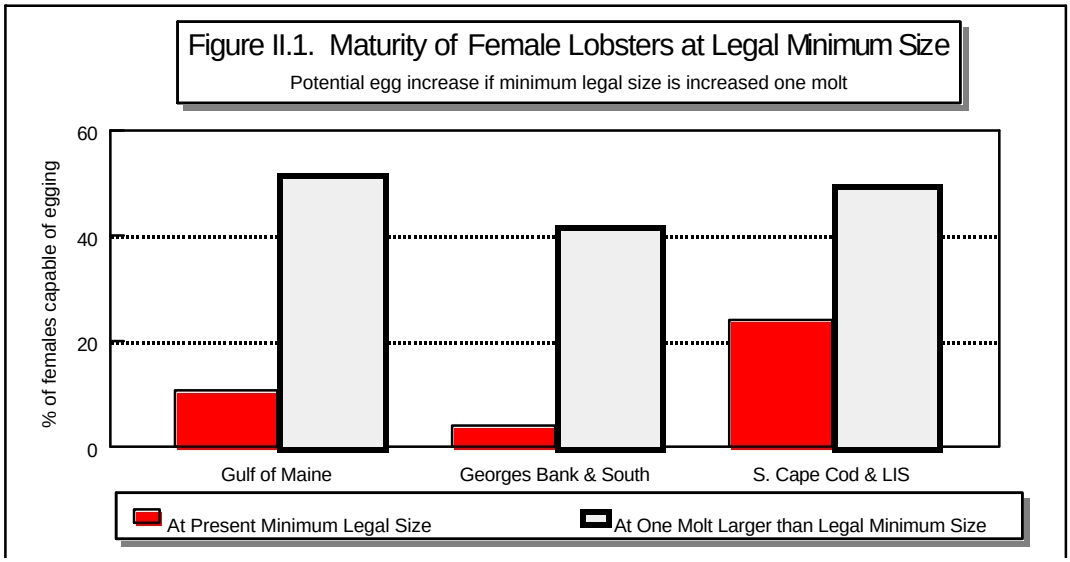
mortality rate, given the regulations in place at that time under the suite of regional management measures, results in a reduction in estimated egg production per recruit to less than 10 percent of a non-fished population. In July 1996, a report prepared by an independent panel of stock assessment experts ("The Bannister Report") confirmed the overfished status of American lobster stocks and advocated (thereby confirming SAW 16 findings) a reduction of fishing effort to minimize the potential for stock collapse.

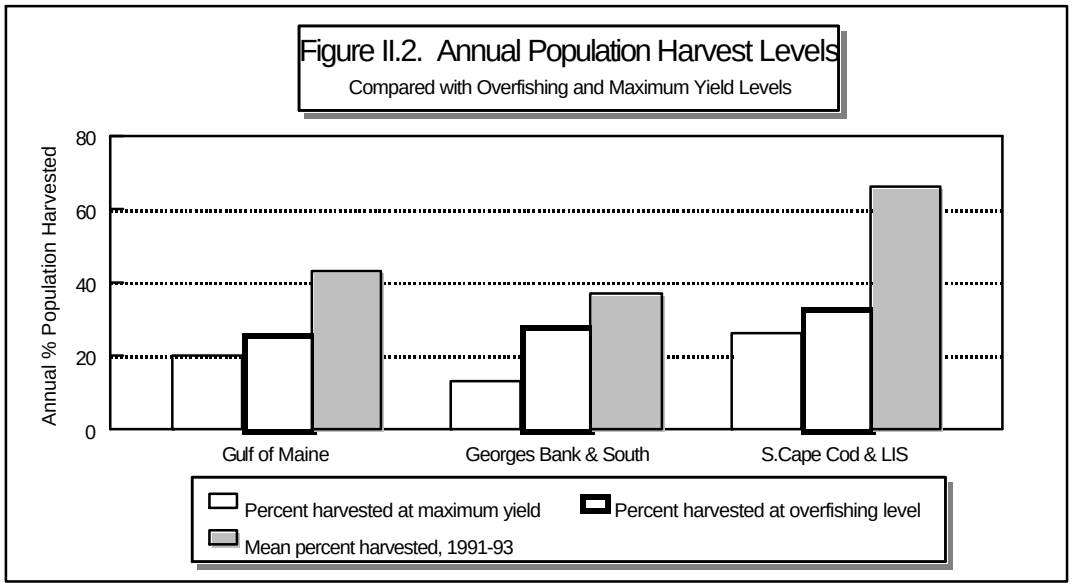
Indicators that both the resource and the fishery are at high risk include:

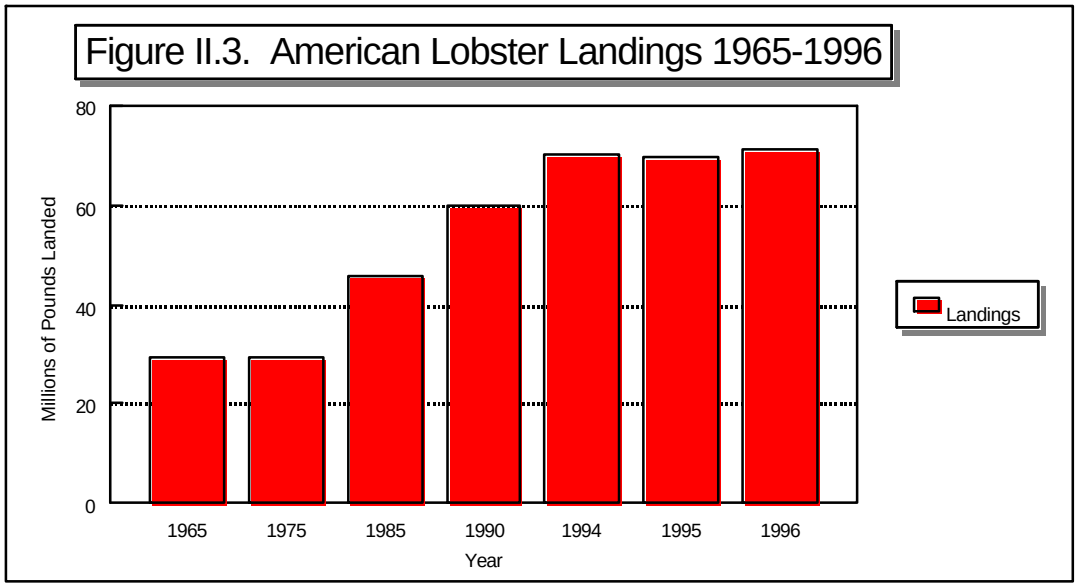
- Egg production, the measure of overfishing in lobster populations, is only 1 to 3 percent of what it would be in an unfished stock, and only a fraction of the egg production (10 percent) that signals overfishing.
- Landings continue to depend primarily on small lobsters just above the legal minimum size (3-1/4 inches carapace length): ranging in recent years from 85% of landings from Georges Bank to more than 90% of female lobsters harvested from inshore waters of the Gulf of Maine. This is an extremely precarious situation since most lobsters at this size have not yet reproduced (Figure II.1). In the Southern New England region (Southern Cape Cod to Long Island Sound), female lobsters mature earlier than in the other two areas, but recent landings have been even more dependent (as high as 98% of all females) on newly recruited animals.
- Close to half, and in some areas as much as 70% of the fishable lobster population is being harvested each year (Figure II.2). This high exploitation along with the dependence on newly recruited lobsters could exacerbate the negative effects of a poor reproductive year, and could result in a sharp downturn in landings in the future. In addition to the low egg production of first time spawners, there is evidence that the eggs they produce are less viable, and the survival of the larvae produced is lower than those produced by larger spawners. This too, is jeopardizing the long-term ability of the lobster population to sustain itself (producing replacements for lobsters harvested), with the danger of a possible stock collapse.
- Although abundance is currently high in some areas, this is due, in part, to favorable environmental conditions that are enhancing survival. If these conditions deteriorate, the resource cannot be expected to support the high level of harvesting that currently exists.
- Lobster fishing effort continues to escalate throughout the lobster's range. For example, in Maine, the mean number of traps fished per boat has more than tripled, from around 200 traps in 1967 up to an average of 603 traps per boat in 1998.

Lobsters have been relatively abundant and landings have reached record highs in recent years (Figure II.3). However, increased landings are probably attributed to intensified fishing effort, as well as favorable environmental conditions which have enhanced egg production and larval survivability. Historical examination of other fisheries strongly suggests that, with continuation of the risk signs noted above, the favorable environmental conditions will not continue indefinitely,

and that one or two "bad years" could jeopardize the future sustainability of the resource and associated economic viability of the lobster fishery. For example, in the Alaska king crab fishery, resource abundance and landings reached record levels in 1978 - 1980. During the next two years, both harvest and crab abundance decreased dramatically to near-zero levels, and the associated industry and crab population abundance levels have not recovered since. A description of this fishery can be found in the publication "Our Living Oceans", NOAA Technical Memorandum NMFS - F/SPO - 19, available from NMFS' Office of Science and Technology, Silver Spring, Maryland.







III. Preferred MANAGEMENT ACTION, RATIONALE, AND ENVIRONMENTAL CONSEQUENCES

NMFS will implement existing, as well as new, American lobster management measures under the authority of the ACFCMA instead of the MSA. Overall public comment during review of the DEIS indicated strong support for the (ACFCMA) plan embodied by the Commission's ISFMP

(Alternative 2 for the lobster trap fishery and Alternative 1 for the non-trap fishery, as identified in the DEIS), and little support for other measures upon which NMFS sought comments. In situations such as American lobster, where a fishery occurs predominantly in state waters, the ACFCMA recognizes that because no single government entity has exclusive management authority for the resource, harvesting is frequently subject to disparate, inconsistent, and intermittent State and Federal regulation detrimental to the conservation and sustainable use of that resource and to interests of fishermen. State-Federal management under ACFCMA confers increased responsibilities to the states in achieving resource management objectives and thereby enhances the interjurisdictional collaboration which must occur to end overfishing and rebuild stocks of American lobster. Accordingly, American lobster regulations will be codified at 50 CFR part 697 issued under the authority of the ACFCMA instead of by the current regulations codified at 50 CFR part 649 under the authority of the MSA.

In this proposed regulatory action, management of the American lobster trap fishery in the EEZ implements Alternative 2 identified in the DEIS, and implements a trap tag program and trap limits in Federal waters throughout the species range, including the Area 4 and Area 5 lobster management areas. The preferred action also provides for a trap cap of no more than 1800 traps in the year 2000 for the offshore (Area 3) fishery. In response to public comments, NMFS has decided, beyond the year 2000, not to identify continued trap reductions as a "default" management measure (see Section III.3). Instead, NMFS will evaluate the Commission's recommendations for resource-wide management of lobster in the EEZ, based upon the Commission's review and approval of conservation - equivalent proposals submitted by the LCMTs. On at least an annual basis, NMFS will identify, in consultation with the Commission and its LCMTs, additional measures to meet ISFMP objectives to end overfishing and rebuild stocks of American lobster.

1. Continued Measures

Continuation of lobster conservation measures already in place include, by are not limited to:

1. A moratorium on new entrants into the fishery through December 31, 1999 (new measures will extend this moratorium);
2. A prohibition on the possession of lobsters bearing eggs or from which eggs have been removed ("scrubbed") by any means;
3. A prohibition on the possession of lobster meat and detached tails, claws or other parts of lobster;
4. A prohibition on the possession of V-notched lobsters (female lobsters that have carried eggs and are marked with a V-shaped cut in the tail);
5. A requirement to install a biodegradable "ghost" panel for traps (to eventually allow lobsters to exit from a lost trap);
6. A minimum carapace size of 3 1/4 inches (8.26cm);
7. A requirement to install escape vents on traps;
8. A prohibition on the possession at any time of more than six lobsters per person when

aboard a head, charter, or dive vessel;
9. A requirement that gear be marked in order to identify the permit holder;
10. A prohibition on the interstate or international trade of live whole lobsters smaller than the Federal minimum size; and
11. A landing limit of 100 lobsters (or parts thereof) per day, up to a maximum of 500 lobsters per trip of five or more days for fishermen using non-trap methods. Other Federal lobster laws relating to more restrictive lobster possession limits remain in effect, including but not limited to certain exempted fisheries.

If management measures differ with those required by state or local law, any vessel owner permitted to fish in the EEZ must comply with the more restrictive requirement. The reader should refer to 50 CFR part 649 and 50 CFR part 697.7 for a more detailed description of these regulations.

2. New Measures

Additional measures will be implemented in Federal waters to complement management measures in state waters under the ISFMP and to strengthen a state-Federal framework to end overfishing and rebuild stocks of American lobster. Note that some measures will apply to all Federal permit holders while others would apply to permit holders who fish only in specific areas. These new measures include:

1. Extend moratorium on new entrants into the fishery. There are currently approximately 3400 vessels with permits to fish for lobster in Federal waters. Under a current moratorium scheduled to end on December 31, 1999, new permits are not being issued. Persons may only enter the fishery by purchasing an existing vessel that already has a limited access permit and then contacting NMFS to request a change of ownership. By this action, NMFS will continue the moratorium. This will avoid any increase in the number of vessels permitted to take lobsters in Federal waters. Such an increase could undermine the conservation benefits of other measures.

2. Increase of minimum size of rectangular escape vents on lobster traps to not less than 1- 15/16 inches (4.92cm) by 5-3/4 inches (14.61cm); and increase of the minimum size of circular escape vents to two portals with unobstructed openings not less than 2-7/16 inches in (6.19cm) diameter. This measure corresponds to lobster gear regulations recommended in the ISFMP, and will allow for increased lobster survival, thereby increasing egg productivity of the resource and contributing to the ISFMP management objectives for American lobster.

3. Prohibition on spearing lobster. This management measure was recommended for Federal waters by the Commission's ISFMP.

4. Lobster Management Areas. NMFS will adopt the boundaries of the lobster management areas specified in the Commission's ISFMP. Accordingly, management measures

and stock rebuilding schedules will be developed based on the status of the stock of American lobsters and management considerations for each of the following lobster management areas.

(a.) EEZ Nearshore Management Area 1. EEZ Nearshore Management Area 1 including state and Federal waters that are near-shore in the Gulf of Maine, as defined by the area bounded by straight lines connecting the following points, in the order stated, and the coastline of Maine, New Hampshire, and Massachusetts to the northernmost point on Cape Cod:

Point	Latitude	Longitude
A	43°58' N.	67°22' W.
B	43°41' N.	68°00' W.
C	43°12' N.	69°00' W.
D	42°49' N.	69°40' W.
E	42°15.5' N.	69°40' W.
G	42°05.5' N.	70°14' W.

Along the Massachusetts, New Hampshire, Maine coast back to point A.

(b) EEZ Nearshore Management Area 2. EEZ Nearshore Management Area 2 including state and Federal waters that are near-shore in Southern New England, defined as follows:

Point	Latitude	Longitude
H	41°40' N.	70°00' W.
I	41°15' N.	70°00' W.
J	41°21.5' N.	69°16' W.
K	41°10' N.	69°06.5' W.
L	40°55' N.	68°54' W.
M	40°27.5' N.	72°14' W.
N	40°45.5' N.	71°34' W.
O	41°07' N.	71°43' W.
P	41°06.5' N.	71°47' W.
Q	41°18'30" N.	71°54'30" W.
R	41°11'30" N.	71°47'15" W.

From point “R” along the maritime boundary between Connecticut and Rhode Island to the coastal Connecticut/Rhode Island boundary and then back to point “H” along the Rhode Island and Massachusetts coast.

(c) Area 2/3 Overlap. In the southern New England area, there shall be an area of overlap between Area 2 and Area 3, defined as follows:

Point	Latitude	Longitude
K	41°10' N.	69°06.5' W.

L	40°55' N.	68°54' W.
M	40°27.5' N.	72°14' W.
N	40°45.5' N.	71°34' W.

(d) EEZ Offshore Management Area 3. EEZ Offshore Management Area 3 comprises entirely Federal waters defined by the area bounded by straight lines connecting the following points, in the order stated:

Point	Latitude	Longitude
A	43°58' N.	67°22' W.
B	43°41' N.	68°00' W.
C	43°12' N.	69°00' W.
D	42°49' N.	69°40' W.
E	42°15.5' N.	69°40' W.
F	42°10' N.	69°56' W.
K	41°10' N.	69°06.5' W.
N	40°45.5' N.	71°34' W.
M	40°27.5' N.	72°14' W.
U	40°12.5' N.	72°48.5' W.
V	39°50' N.	73°01' W.
X	38°39.5' N.	73°40' W.
Y	38°12' N.	73°55' W.
Z	37°12' N.	74°44' W.
ZA	35°34' N.	74°51' W.
ZB	35°14.5' N.	75°31' W.
ZC	35°14.5' N.	71°24' W.

From point “ZC” along the seaward EEZ boundary to point “A”.

(e) EEZ Nearshore Management Area 4. EEZ Nearshore Management Area 4 including state and Federal waters that are near-shore in the northern Mid-Atlantic area, defined by the area bounded by straight lines connecting the following points:

Point	Latitude	Longitude
M	40°27.5' N.	72°14' W.
N	40°45.5' N.	71°34' W.
O	41°07' N.	71°43' W.
P	41°06.5' N.	71°47' W.
S	40°58' N.	72°00' W.
T	41°00.5' N.	72°00' W.

From Point "T", along the New York/New Jersey coast to Point "W"

W	39°50' N.	74°09' W.
V	39°50' N.	73°01' W.
U	40°12.5' N.	72°48.5' W.

From Point "U" back to Point "M".

(f) EEZ Nearshore Management Area 5. EEZ Nearshore Management Area 5 including state and Federal waters that are near-shore in the southern Mid-Atlantic area, defined by the area bounded by straight lines connecting the following points, in the order stated:

Point	Latitude	Longitude
W	39°50' N.	74°09' W.
V	39°50' N.	73°01' W.
X	38°39.5' N.	73°40' W.
Y	38°12' N.	73°55' W.
Z	37°12' N.	74°44' W.
ZA	35°34' N.	74°51' W.
ZB	35°14.5' N.	75°31' W.

From Point "ZB" along the coasts of North Carolina, Virginia, Maryland, Delaware, New Jersey back to Point "W".

(g) Nearshore Management Area 6. The Nearshore Management Area 6 includes New York and Connecticut state waters specified as follows:

T	41°00.5' N.	72°00' W.
S	40°58' N.	72°00' W.

From Point "S", boundary follows the 3 mile limit of New York as it curves around Montauk Point to Point “P”

P	41°06.5' N.	71°47' W.
Q	41°18'30" N.	71°54'30" W.
R	41°11'30" N.	71°47'15" W.

From point “R”, along the maritime boundary between Connecticut and Rhode Island to the coast; then west along the coast of Connecticut to the western entrance of Long Island Sound; then east along the New York coast of Long Island Sound and back to Point “T”.

(h) EEZ Nearshore Outer Cape Lobster Management Area. EEZ Nearshore Outer Cape Lobster Management Area including state and Federal waters off Cape Cod, specified as follows:

Point	Latitude	Longitude
F	42°10' N.	69°56' W.
G	42°05.5' N.	70°14' W.
H	41°40'N.	70°00'W.
I	41°15' N.	70°00' W.
J	41°21.5' N.	69°16' W.

From Point "J" along the outer Cape Cod coast to Point "F".

5. Lobster management area designation for vessels fishing with traps. NMFS will require that owners of vessels who elect to use traps must inform NMFS each year of the lobster management areas in which they will set their gear. A permit holder may set traps in more than one area, but the most restrictive regulations for any one elected area will apply regardless of where the vessel is fishing. Initially proposed regulations would have prohibited Federal permit holders from electing both Area 3 and any of the other lobster management areas. However, public comment strongly opposed this restriction, indicating that such a prohibition would have unduly disrupted historical fishing practices and could have resulted in an unprecedented proliferation of fishing effort in the offshore EEZ, thereby jeopardizing resource management objectives.

6. Near-shore area trap limits. In order to cap effort in the near-shore areas, Federal permit holders electing to fish in Areas 1, 2, the Area 2/3 overlap, 4, 5, 6 and in the Outer Cape Lobster Management Area will be limited to a maximum of 1000 traps in 1999 and to 800 traps in the year 2000. Further trap limits may be required in the future if the egg-rebuilding schedule is not met by these limits or other conservation equivalent measures. The purpose of this measure is to ensure that the conservation benefits that might be achieved by other measures are not lost by further expansion of fishing effort in the near-shore areas. Although many of the states are adopting similar limits, measures in this rule would only apply to Federal permit holders. Alternative and/or additional management measures other than those pertaining to trap limits will be considered in Federal waters in accordance with Commission recommendations and adaptive management procedures identified in the final rule.

7. Near-shore area maximum trap size. One way to increase fishing effort without increasing the number of traps in the water is to increase the size of those traps. The larger the trap, the more lobsters it can hold. To minimize this, Federal permit holders electing to fish in Areas 1, 2, the Area 2/3 overlap, 4, 5, 6 and in the Outer Cape Lobster Management Area will be prohibited from setting traps in the near-shore areas that are larger than 22,950 cubic inches (376,082 cc).

8. Area 1 maximum carapace size. For Federal permit holders fishing in Area 1, there will be a maximum harvestable size, in order to have compatible measures with the Commission's ISFMP recommendation. The Commission did not approve a maximum carapace size for any other management area. Lobsters with a carapace size greater than 5 inches (12.7 cm) cannot be retained in Area 1, or by fishermen who elect Area 1 as one of their designated management areas. The carapace length is the straight line measurement from the rear of the eye socket parallel to the center line of the carapace to the posterior edge of the carapace (the unsegmented shell of the lobster). The purpose of this measure is to protect large females that are capable of producing many eggs. This measure will provide increasing conservation benefits as the number of larger individuals increases in the American lobster population.

9. Off-shore area trap limits and maximum trap size. Federal permit holders electing to fish in Area 3 will be limited to no more than 2000 traps in 1999 and no more than 1800 traps in

the year 2000. Further reductions of this trap limit may be required in the future if the egg-rebuilding schedule is not met by these limits. In addition, traps set in Area 3 can be no larger than 30,100 cubic inches (493,249 cc). A higher maximum number of traps and larger maximum trap size will be implemented for Area 3, in contrast to the near-shore areas, to offset the additional costs and time required for fishing offshore.

Federal permit holders who elect to fish in Area 3 and any of the near-shore areas (Areas 1, 2, 4, 5, 6 and in the Outer Cape Lobster Management Area), except the Area 2/3 Overlap, will be limited to a maximum of 1000 traps in 1999 and to 800 traps in the year 2000. Federal permit holders who elect to fish in Area 3 and any of the near-shore areas (Areas 1, 2, 4, 5, 6 and in the Outer Cape Lobster Management Area) except the Area 2/3 Overlap, will be prohibited from setting traps that are larger than the near-shore maximum size limit of 22,950 cubic inches (376,082 cc). Alternative and/or additional management measures will be considered in Federal waters in accordance with Commission recommendations and adaptive management procedures identified in the final rule.

10. Trap tag allocations. As a way to enforce the trap limits proposed for each lobster management area, NMFS will require that each trap set by a Federal permit holder have a trap tag attached to the trap bridge or central cross-member. Lobster fishermen will be required to purchase tags from NMFS or a NMFS-authorized distributor. Each permit holder will be allowed to purchase tags, up to the maximum number of traps allowed in his or her area, plus ten percent to cover in-season loss. Those persons fishing in near-shore areas will be allowed to purchase up to 880 tags in the year 2000. Those persons fishing only in Area 3 or those persons selecting both the Area 3 and the Area 2/3 Overlap will be allowed to purchase up to 1980 tags in the year 2000. Initially proposed regulations would have required Federal permit holders who fish in the Area 2/3 Overlap to abide by the most restrictive of either Area 2 or Area 3 regulations. However, public comment strongly opposed this restriction, indicating that it would have unduly disrupted historical fishing practices. The cost per tag is expected to be approximately $0.14. Tags will only be valid for one year and must be replaced each year. Tags may not be sold, transferred or given away. The requirement that gear be marked with a vessel's official number, Federal permit or tag number, or other specified form of identification will continue in place until the new requirement to affix a tag to each trap is implemented.

11. Harvest Restriction. Any vessel on a fishing trip in the EEZ that takes lobsters by a method other than traps may not possess on board, deploy, fish with, or haul back traps.

12. State/Federal Coordination. NMFS may consider alternative tagging programs with cooperating states through appropriate formal agreements.

13. Modifications to the plan. This is not a static plan. NMFS will specify additional fishery measures as necessary to meet the egg rebuilding schedule established by the ISFMP. Some of the measures that might be considered are continued reductions in fishing effort (e.g., number of traps fished), increases in the minimum harvestable size, and other measures identified

by the LCMTs through the ISFMP's adaptive management provisions. NMFS will consult with the Commission, and propose future actions through Federal rulemaking and associated public review procedures.

NMFS endorses an area management approach which allows industry-tailored management measures to meet industry needs on an area by area basis. Under this process, NMFS will work in partnership with the Commission and the states, under the provisions of the ISFMP, in continuing efforts to develop a unified "seamless" approach to bridge state and Federal jurisdictions on an area by area basis.

3. Areas of Controversy

1. Lack of additional, specified management measures during remainder of stock rebuilding period.

During review of Amendment 3 to the ISFMP, NMFS concluded that the amendment was a positive and constructive beginning to the process of developing the collaborative framework which must exist among state and Federal agencies to effectively manage American lobster throughout its range. However, NMFS was concerned how yet unspecified management measures would achieve the ISFMP management objectives during the 8-year stock rebuilding period. Since then, initial progress in meeting these objectives has been achieved by preliminary favorable review (by the Commission's Lobster Technical Committee) of area management proposals submitted by the LCMTs. The Commission will bring these plans to public hearings during April - May 1999. Additional regulations will be required in both state and Federal waters. The success of the ISFMP depends on the commitment of the Commission and the states toward continued implementation of intensified management measures.

2. Status of Area Management Plans.

Interjurisdictional management is complicated by the fact that American lobster is an abundant, but overfished, resource with three known stock components, divided into seven lobster management areas which represent diverse socio-economic characteristics. Area management under the ISFMP is being developed with industry participation on seven individual LCMTs established by the Commission. Only one of the seven lobster management areas (Area 3) is located entirely in Federal waters. The plan submitted by the Area 3 LCMT advocates a limited entry regime based upon historical participation, which is being evaluated under the Commission's ISFMP. Issues concerning how this proposed plan relates to fishing effort limitations and other elements of the other six area plans, and whether or not it represents the consensus of the Area 3 fishery sector, have been contentious. The Commission has scheduled hearings during April - May 1999 to begin public review of major components of the LCMT proposals, for ultimate consideration of approval by December, 1999. Since lobstermen throughout the range of the resource often fish in more than one management area, and, since the area plans vary with respect to proposed regulatory measures (such as minimum lobster size, historic participation, trap limits,

and trap allocation procedures), these hearings will provide an essential mechanism to assure an integrated public and socio-economic evaluation for enabling a unified state-Federal approach for lobster area management.

3. Trap Reductions

Trap limits and/or trap reductions have been widely discussed and debated as a lobster management measure by the industry, resource managers and the scientific community. Several states, as well as public and industry advisory groups, have supported trap limits as a preferred or identified option during public hearings and recent public comment periods on issues pertaining to lobster management options in state and Federal waters.

Trap limits in the EEZ will complement existing controls on fishing effort in waters of Maine and Massachusetts, the two largest lobster producing states, which accounted for approximately 71% of all American lobster landed in 1996. Maine accounted for 44% of all American lobster valued at $107 million and Massachusetts accounted for 27% of all lobsters landed in 1996 valued at $64.5 million. These two states currently have in place restrictions on the maximum number of traps allowed by their lobster trap fishermen. According to data presented at the "Lobster Summit" sponsored by the New England Aquarium in Boston, Massachusetts, in February 1997, the average number of traps fished by Maine lobstermen was 562 traps per vessel in 1996. The State of Maine currently has an overall restriction of 1200 traps regardless of area fished, with some Maine management zones adopting smaller caps (600-800 pots/traps) to further curtail fishing effort. In Massachusetts, the state has a maximum limit or cap of 800 traps in state waters. The overall social and economic impacts of trap reduction on the industry is addressed in Section III.5 and IV.2. NMFS estimates that 26% and 27.4% of Federal permit holders in the nearshore and offshore (Area 3) EEZ fisheries fished more traps in 1995 than Federal regulations will allow under proposed regulations. Since expansion in numbers of traps has likely increased since 1995, the resulting benefits of trap limits on achieving reductions in lobster fishing mortality are probably underestimated.

NMFS acknowledges that the conservation benefits of trap limits and trap reductions are difficult to quantify, due to such factors as gear efficiency and saturation, and changes in fishing practices. In addition, some individuals during the DEIS public comment period expressed apprehension that Federal permit holders who previously fished fewer traps in the absence of a trap limit would decide to increase fishing effort up to that limit once that limit was established. Although changes in fishing behavior and fishing business decisions are difficult to predict, NMFS believes that this concern is more germane to trap fisheries in certain state waters, and may not be necessarily applicable to the EEZ. The capping and reduction of fishing effort is an important step in reducing lobster fishing mortality at some threshold level, which when combined with other management measures, will increase the effectiveness of those measures and achieve ISFMP objectives to end overfishing and rebuild stocks of American lobster.

4. Issues to be Resolved

1. Area Management

State and Federal management of American lobster under ACFCMA is predicated on an area management approach. Accordingly, one of the ISFMP goals is to minimize inconsistencies between state and Federal management regimes. Progress, from a Federal perspective, is being demonstrated through the implementation of management measures recommended by the Commission. The successful implementation of additional needed measures to achieve management objectives (e.g., the schedule for increasing lobster egg production in the ISFMP) will be contingent, not only on the resolve of state jurisdictions to achieve those goals, but also by the Commission's timeframe for the technical, public and policy review of area management proposals. The successful attainment of management goals is also influenced by the ISFMP's specification of mandatory regulations in state waters, the establishment of a compliance schedule for implementation of those measures,and inclusion of recommendations in the ISFMP for actions in Federal waters. Area management is further challenged by the time required to implement regulatory measures in state waters on a state by state basis, which can vary from several days to several months. Similarly, timing of lobster management measures in the EEZ is subject to Federal legislative requirements and rulemaking. The ability to effectively meet the American lobster annual stock rebuilding goals, in consultation with the LCMTs, is dependent upon the timely implementation of management measures in the respective state and Federal jurisdictions. In an effort to facilitate and streamline this process, NMFS will request that the Commission makes its recommendations, as appropriate, for EEZ actions prior to December 1 of each year during the stock rebuilding period. This would provide the lead time required for review of the recommendations, Federal rulemaking, and notifications to Federal permit holders prior to the Federal fishing year, which begins annually on May 1.

Implementation of some area management measures, such as trap limits and gear tagging requirements, may initially result in duplication and/or inconsistencies between state and Federal regulations on a lobster management area by area basis. NMFS will consider ways to streamline and jointly administer such regulations (complying with lobster stock rebuilding objectives) with cooperating states through appropriate formal agreements.

Initial progress in unifying resource-wide approaches in area management for both state and Federal waters has been recently demonstrated through ISFMP consultations addressing such issues as gear marking protocols and interjurisdictional enforcement of lobster regulations. These deliberations are essential in the potential establishment of a seamless plan in both state and Federal waters. Another area in need of resolution is the evaluation of protocols for implementing effort controls among the seven lobster management areas, including but not limited to, actions based upon historical participation in the lobster fishery. Such evaluation under the ISFMP provisions will ensure industry, public, and peer review of proposed area management actions, particularly those which impact user groups who fish in multiple lobster management areas in both state and Federal waters. NMFS will continue to participate in these ISFMP activities.

2. Mandatory Reporting

Mandatory reporting of all lobster landings at the vessel and dealer level, on a trip by trip basis, is an essential component for assessing the future status of lobster stocks and monitoring the eventual success of fishery management measures. The associated reporting requirements for such a program from a coastwide state/Federal perspective are being developed under the auspices of the state/Federal Atlantic Coastal Cooperative Statistics Program (ACCSP). A preliminary NMFS assessment of a lobster reporting system proposes that all vessels taking and landing lobsters for sale should record, on appropriate forms, statistics which may include, but not be limited to, information describing the weight and/or number of lobster landed, the number of traps/pots hauled (or number and duration of tows), and area or region fished, by day or trip (whichever is longer). Similarly, reporting by dealers who purchase lobster from any vessel holding a lobster permit should submit a monthly summary of purchases on a vessel by vessel basis. This reporting could subsequently be expanded to provide vessel by vessel trip level data. These reporting requirements could also apply to species purchased by these dealers from other fisheries which have a high volume of inshore trips. These would include sea urchins and other shellfish. Dealers holding other Federal permits currently required to report trip level data may be relieved of this requirement for lobster pot trips and would fall under the requirements for purchases from specific gear types.

3. Minimum Carapace Length (Gauge Size) Increase

Amendment 3 to the ISFMP recommended that the Federal Government initiate discussions with Canada concerning coordination of future gauge size increases. Accordingly, in January, 1999, NMFS initiated communications with the Canada Department of Fisheries and Oceans concerning the potential for coordination of future American lobster management actions. Management plans for lobster in both Canada and the United States share many common elements including industry participation, area-based management, and a “tool box” approach, allowing consideration of conservation-equivalent measures and associated alternatives for achieving resource rebuilding objectives. One way to enhance joint efforts and shared goals for interjurisdictional lobster management involves evaluation and discussion of the biological, social, and economic aspects of gauge size increases with industry representatives from both countries. NMFS anticipates that proposed increases in lobster minimum size for several of the lobster management areas will be addressed during Commission public hearings, relating to approval of an addendum to the ISFMP prior to December 31, 1999.

5. Environmental Consequences

(1) Effects on Lobster

This action continues current management measures in the EEZ, extends the current moratorium on new entrants in the EEZ fishery, and implements additional EEZ-wide regulations concerning area management, maximum trap size, and minimum vent size in lobster traps. Harvest of

American lobster by methods other than pots or traps will be maintained at historical harvest levels. Trap limits and trap tagging requirements will be implemented in Federal waters throughout the range of the resource. A cap on the maximum number of traps in 1999 curtails the proliferating fishing effort evidenced in the lobster fishery in recent years. A decrease in the number of allowable traps in the year 2000 will further reduce fishing effort and foster corresponding reductions in fishing mortality, as well as enhance the effectiveness of other management measures. A maximum carapace size in the Gulf of Maine (Area 1) has conservation benefit for protecting older, sexually mature lobsters, thereby enhancing stock rebuilding. This benefit will be enhanced at such time the frequency of currently depressed numbers of larger lobsters increases in the Gulf of Maine. Additional management measures, in consultation with the Commission, will be implemented during the stock rebuilding period to increase egg production of American lobster throughout their range. These measures may include continued trap reductions, history-based allocation of fishing effort, and increase in the minimum harvestable size, and/or other measures identified by the CMTs in complying with the annual stock rebuilding targets. The ultimate success in ending overfishing of American lobster and rebuilding American lobster stocks depends on concurrent management actions in state waters, where a majority of the fishery occurs.

(2) Effects on Environment

The capping and reduction in number of lobster traps during 1999-2000 could result in increased undisturbed habitat and refuge for the American lobster. The practice of setting out large numbers of traps over large areas would also be reduced, thereby enhancing the availability of undisturbed habitat, and reducing the prevalence of "ghost gear" which is often the result of user conflicts and/or storms.

(3) Effects on Marine Mammals and Sea Turtles

The impacts of the current regulations were assessed in the EA and ESA Section 7 Biological Opinion issued regarding Amendment 5 to the lobster FMP. See also Section VI.5 for a description of an updated (section 7) Biological Opinion issued in December 1998. A measure likely to affect the amount of gear fished is the moratorium on new entrants into the fishery. However, there may be a delay in conservation benefits since there may be a number of currently inactive permits which could be activated at any time or sold to new individuals wishing to enter the fishery. Cetaceans and sea turtles are known to become entangled in lobster pot gear. Since the amount of gear has increased significantly in recent years, the risk of entanglement has also increased. If the trap limitations in the years 1999 and 2000 provide an impetus for lobstermen to increase fishing effort (number of pots) over current levels, the risk of entanglement of cetaceans and sea turtles in lobster gear may increase over current levels. If the trap limitations, especially in succeeding years beyond the initial year of the trap reduction period, result in reduction of current fishing effort levels, entanglement levels could possibly decrease. NMFS has implemented measures under the MMPA to begin reducing the risk of lobster gear to whales. However, the current plan contains regulations which primarily require best available current practices. The

majority of the risk reduction under the MMPA plan will come only after gear modifications have been developed through ongoing research and development.

No information is available at this time on protected species impacts from the use of non-trap gear types specifically targeting lobster. However, small and large cetaceans, pinnipeds, and/or sea turtles have been entangled in one or more of these gear types. The levels of impact are unknown, primarily due to low percentages of observer coverage in most of these fisheries. This potential action is intended to cap effort in the non-trap sector rather than to reduce that effort. Therefore, the action for the non-trap sector is not expected to affect protected species.

(4) Social Cultural and Economic Impacts

Trap/Pot Fishery

Increased lobster landings in recent years are probably attributed to intensified fishing effort as well as favorable environmental conditions which have enhanced egg production and larval survival. If favorable environmental conditions continue, economic revenues may remain at current levels or increase with current or increased fishing effort. An adverse change in the environment, in combination with present overfishing of the resource, could immediately jeopardize the future sustainability of the lobster industry. It is anticipated that fishing effort will decrease under this action. If the establishment of trap limit regulations results in an impetus for lobstermen to fish more traps, however, in an effort to document "historical" fishery involvement, per-capita costs for fishing gear acquisition and maintenance would increase, resulting in decreased revenues at current lobster prices and resource abundance. Similarly, new requirements concerning maximum trap size and minimum vent size requirements may require expenditures for modified fishing gear. Conversely, if trap limitations result in actual decreases in number of traps fished, per-capita costs for fishing gear acquisition and maintenance could decrease, possibly resulting in overall increased economic efficiencies.

Trap vessels can be divided into nearshore and offshore vessels. This division is generally a factor of and reflected in vessel size. Trap vessels under 50 feet are usually nearshore vessels, with larger vessels being offshore. Nearshore vessels, especially, tend to use an annual round involving gear and species switching by season. Offshore vessels, however, are also likely to take other species as either bycatch or directed fishing.

<u>Nearshore</u>

A review of NMFS permit data for 1996 shows that there were 183 vessels which would be affected by a year two cap of 800 traps. They are small to mid-sized vessels (Tables III.1 and III.2), based primarily in Rhode Island and Maine, followed by Massachusetts and then New Jersey (Table III.3). Only the individual primary ports of Point Judith, RI (29 vessels) and Belford, NJ (10), however, show more than 10 affected vessels.

Nearly half of these 183 vessels possess at least some other Federal permits (Table III.4), though all these fisheries are also under increasingly restrictive regulations at this time. The fact that many of these trap fishermen did not apparently renew their permits in alterative fisheries during 1997 (Table III.4), suggests that there are few other fishing income sources available for them. Some income may be being earned, however, in fisheries not yet under Federal management or in state waters.

Table III.1 Length Data for Trap Vessels Impacted by 800 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Length for All Trap Vessels Impacted by 800 Trap Cap	**Number of Trap Vessels Impacted by 800 Trap Cap and in Various Length Categories**				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
40 feet	3	154	26	0	0

Table III.2 Tonnage Data for Trap Vessels Impacted by 800 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Trap Vessels Impacted by 800 Trap Cap	**Number of Trap Vessels Impacted by 800 Trap Cap and in Various Tonnage Categories**			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
19 GRT	2	181	0	0

Table III.3 Number of Trap Vessels Impacted by 800 Trap Cap and by Primary Port State holding 1996 Commercial Federal Lobster Permits

CT	**DE**	**MA**	**ME**	**NH**	**NJ**	**NY**	**RI**	**Other**
4	3	38	48	4	25	4	56	1

Table III.4 Numbers of Commercial Federal Lobster Permitted Trap Vessels Impacted by 800 Trap Cap and holding Different Types of Other Federal Permits

	Multispecies	**Summer Flounder**	**Squid/ Mackerel/ Butterfish**	**Atlantic Sea Scallops**	**Black Sea Bass**	**Scup**
1996	142	16	92	87		
1997	55	4	33	36	8	9

N.B. Black sea bass and scup did not come under Federal permitting until 1997.

Offshore

Only 20 trap vessels would be impacted by the initial 2000 trap cap for offshore vessels. These are mid to large vessels (Tables III.5 and III.6), located primarily in Rhode Island (Table III.7). No single primary port, however, shows even 10 affected vessels.

Almost all have other Federal permits (Table III.8), though restrictions in those fisheries will limit redirected effort. The fact that many of these trap fishermen have apparently let their permits expire in those alternative fisheries in 1997 supports this hypothesis. Some fishermen, however, may also be participating in fisheries which do not require Federal permits (such as Jonah crabs) or in state waters fisheries. In the past 5 years, some participants in the offshore lobster fishery have diversified into black sea bass pots. Recent black sea bass and scup quotas under the joint Mid-Atlantic Council/Commission Summer Flounder FMP limit that activity. However, none of the fishermen affected by a 2000 trap cap had either black sea bass or scup permits in 1996 or 1997, though some may still be appealing limited access status. Thus, the black sea bass and scup regulatory measures are unlikely to add significant additional burden to the lobster trap fishermen under consideration here.

Table III.5 Length Data for Trap Vessels Impacted by 2000 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Length for All Trap Vessels Impacted by 2000 Trap Cap	**Number of Trap Vessels Impacted by 2000 Trap Cap and in Various Length Categories**				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
69 feet	0	0	7	13	0

Table III.6 Tonnage Data for Trap Vessels Impacted by 2000 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Trap Vessels Impacted by 2000 Trap Cap	**Number of Trap Vessels Impacted by 2000 Trap Cap and in Various Tonnage Categories**			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
92 GRT	0	5	12	3

Table III.7 Number of Trap Vessels Impacted by 2000 Trap Cap and by Primary Port State holding 1996 Commercial Federal Lobster Permits

RI	**Other**
18	2

Table III.8 Numbers of Commercial Federal Lobster Permitted Trap Vessels Impacted by 2000 Trap Cap and holding Different Types of Other Federal Permits

	Multispecies	Summer Flounder	Squid/ Mackerel/ Butterfish	Atlantic Sea Scallops	Black Sea Bass	Scup
1996	15	4	11	6		
1997	3	0	1	4	0	0

N.B. Black sea bass and scup did not come under Federal permitting until 1997.

Non-Trap/Pot Fishery

Historical levels of harvest are not anticipated to be substantively impacted, resulting in a no-net decrease in revenues for approximately 76% of participants in this fishery.

There are 21 mobile gear vessels whose income would be affected by 5% or more under a limit of 100 lobsters per day, up to a maximum of 500 lobsters per trip. All are commercially permitted only. They are larger on average than the mobile gear sector as a whole (Tables III.4 and III.10 versus Tables V.1 and V.2), and almost all claim primary ports of landing in Massachusetts (Table III.11). The majority also hold permits for some or all of the other major trawl fisheries in the region (Table III.12), indicating some flexibility in their options for redirecting effort to alternative fisheries. However, given that those alternative fisheries are all under increasingly restrictive regulations on landings and fishing time, relatively little redirection is likely to be possible to any one fishery. Increased effort would need to be spread across all available fisheries.

Table III.9 Length Data for Mobile Gear Vessels Impacted by >5% with 1996 Commercial Federal Lobster Permits

Avg. Length for All Mobile Gear Vessels Impacted by >5%	Number of Mobile Gear Vessels Impacted by >5% and in Various Length Categories				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
75 feet	0	<3	<3	17	<3

Table III.10 Tonnage Data for Mobile Gear Vessels Impacted by >5% with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Mobile Gear Vessels Impacted by >5%	Number of Mobile Gear Vessels Impacted by >5% and in Various Tonnage Categories			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
130 GRT	0	3	9	9

Table III.11 Number of Mobile Gear Vessels Impacted by >5% and by Primary Port State

holding 1996 Commercial Federal Lobster Permits

MA	Other
18	3

Table III.12 Numbers of Commercial Federal Lobster Permitted Mobile Gear Vessels Impacted by >5% and holding Different Types of Other Federal Permits

	Multispecies	Summer Flounder	Squid/ Mackerel/ Butterfish	Atlantic Sea Scallops	Black Sea Bass	Scup
1996	21	16	21	19		
1997	16	11	11	15	4	6

N.B. Black sea bass and scup did not come under Federal permitting until 1997.

See Section V.4 of this FEIS for additional description of the associated economic and social impacts under this alternative.

IV. ALTERNATIVES TO Preferred FEDERAL ACTION

1. Summary

The DEIS analyzed six different alternatives for the lobster trap fishery. The trap fishery alternatives included: taking no action; implementing measures in Federal waters recommended by the Commission; implementing additional nearshore/offshore trap limits with a buffer zone; implementing a four-tier nearshore/offshore trap limit; implementing nearshore fixed trap limits in combination with offshore limits based on historical participation; and prohibiting lobster fishing in Federal waters. The three non-trap/pot alternatives included maintaining a limitation on landings by fishermen using gear or methods other than traps to 100 lobsters per trip of 24 hours or less duration or 500 lobsters for a fishing trip of 5 days or longer; limit landings by non-trap gear to a maximum of 500 lobsters per trip, regardless of trip length; and a prohibition on lobster fishing in Federal waters.

Management options without an identified preferred alternative, were taken to 13 public hearings in nine states. Several hundred written and oral comments were received during the public comment period, which ran from March 27 - May 19, 1998. A total of 1124 individuals attended the public hearings, which were held from April 27, 1998, through May 19, 1998 and 209 individuals provided testimony.

A brief description of the major management measures for each trap/pot and non-trap/pot alternative is provided below.

Trap/Pot Alternatives

Non-Selected Alternative 1: Maintain status quo or take no action.

Taking no action would continue current regulations pertaining to the harvest, possession, landing, sale, purchase, or receipt of American lobster. No other management measures would be implemented for the lobster trap/pot fishery.

Alternative 2: Implement the Commission's (ISFMP Amendment 3) Recommendations in Federal Waters. This alternative was selected as the preferred action discussed in this FEIS (see Section III).

Federal Fishing Zones and the Buffer Zone Applying to Alternatives 3, 4, and 5 :
Alternatives 3, 4, and 5 envision that Federal permit holders would have to fish exclusively in one of three zones for the duration of the rebuilding period. Persons declaring into Zone A would be allowed to set traps anywhere from the coastline to 30 miles offshore, subject to the maximum number of traps as specified in each alternative. Zone B would include only Federal inshore waters, from 3 to 30 miles offshore, and Zone C would include only waters beyond 40 miles offshore. A 10-mile wide "buffer zone" where no lobster traps could be set would be created in the band from 30 to 40 miles offshore. The DEIS also looked at using a boundary line for zones that has no buffer area, and sought comment on the zone concept in general.

Non-Selected Alternative 3: Nearshore/Offshore Trap Limits with Buffer Zone
Fishermen declaring into Zone A or B would be limited to a maximum of 800 traps in 1999, and then the trap allocation would be reduced by 10% a year for 4 years. Fishermen declaring into Zone C, the offshore EEZ, would be limited to a maximum of 2000 traps in 1999, and then the trap allocation would be reduced by 10% a year for 4 years.

Non-Selected Alternative 4: Four-tier Nearshore/offshore trap limit with a buffer zone.
Alternative 4 is similar to Alternative 3, except that it is intended to discourage individuals from building up to a trap limit if they typically fish fewer traps than a limit would allow. Persons currently fishing inshore (in Zones A or B) who are setting fewer than 400 traps would be limited to a maximum of 400 traps in 1999. The maximum number of traps allowed to these fishermen would decrease by 40 traps per year for four years, down to a maximum of 240 traps in 2003. Similarly, persons fishing in Zone C who presently use fewer than 1000 traps would be limited to a maximum of 1000 traps in 1999; this limit would be reduced by 100 traps per year for four years to a maximum of 600 traps in 2003. Those who currently use more than 400 traps in Zones A and B or more than 1000 traps in Zone C would be subject to the same trap limits and reductions as in Alternative 3.

Non-Selected Alternative 5: Nearshore Fixed Trap Limits/Offshore Historical Participation
Zones A and B: Same as in Alternative 3. In years after 2003, strong consideration would be given to a trap allocation program based on historical level of participation.

Zone C: In Year 1, permit holders would be allocated 75% of the number of traps they typically fished during a defined baseline period. The baseline period would be determined as part of this action. A variety of records could be used to establish numbers of traps fished. In subsequent years 2 through 5, the allocation would be reduced by 10% of year 1. Example: 3000 trap baseline; 75% = 2250 traps; subsequent annual reduction = 225 traps:

Non-Selected Alternative 6: Ban fishing for and possession of lobsters in Federal waters.
This alternative would require removal of all trap gear and closure of the EEZ to fishing for, and possession of, American lobster.

Non-Trap/Pot Alternatives:

Alternative 1: Landings limited to 100 lobster per day, up to a maximum of 500 lobster per trip of five or more days.
This alternative was included in the preferred action discussed in this FEIS (see Section III). This measure is part of the interstate management plan and has already been implemented in Federal waters as an interim final regulation (63 FR 10154, March 2, 1998).

Non-Selected Alternative 2: Landings limited to a maximum of 500 pounds of lobster per trip, regardless of trip length. This alternative is intended to cap landings from the non-trap sector at current levels and to ensure no expansion of the non-trap sector as the trap sector reduces effort.

Non-Selected Alternative 3: Prohibit fishing for and possessing lobster harvested with non-trap methods. This would stop the small amount of directed fishing as well as bycatch landings of lobster by persons using non-trap methods.

2. Alternatives Considered for the Trap Fishery

Non-Selected Alternative 1: Continue Existing Management Measures Only/Status Quo

This alternative would continue current Federal lobster management regulations contained in the Council's FMP for Federal waters (50 CFR Part 649) under MSA, and those regulations under ACFCMA (50 CFR Part 697). No other management measures would be implemented for the lobster trap/pot fishery.

(1) Effects on American Lobster

This alternative would allow continued high levels of lobster fishing effort and would probably increase resource overfishing. The most current stock assessment (June 1996, SAW 22) documented continued high levels of fishing mortality, with an increased preponderance of landings from small lobsters just above the minimum legal size. This is an extremely risky

situation, since most lobsters at this size have not yet reproduced. Well over half, and in some areas as much as 80% of the fishable lobster population is being removed each year. A poor reproductive year can result in a sharp downturn in landings. Current effort levels, if left unchecked under this alternative, will jeopardize the ability of the lobster population to sustain itself with the danger of a possible stock collapse.

(2) Effects on Environment

This alternative would not change the current effects on the environment.

(3) Effects on Marine Mammals and Sea Turtles

The impacts of the current regulations were assessed in the EA and ESA Section 7 Biological Opinion issued regarding Amendment 5 to the lobster FMP. The only current measure likely to affect the amount of gear fished is the moratorium on new entrants into the fishery. However, there may be a delay in conservation benefits since there may be a number of currently inactive permits which could be activated at any time or sold to new individuals wishing to enter the fishery. Cetaceans and sea turtles are known to become entangled in lobster pot gear. Since the amount of gear has increased significantly in recent years, the risk of entanglement has also increased. Under this alternative, there would be no controls on future trap gear increases. Thus, little action would be taken under lobster management authority to reduce the risk of entanglement, and entanglement risk could actually increase if the number of traps increases. NMFS has implemented measures under the MMPA to begin reducing the risk of lobster gear to whales. However, the current plan contains regulations which primarily require best available current practices. The majority of the risk reduction under the MMPA plan will come only after gear modifications have been developed through ongoing research and development.

(4) Social/Cultural and Economic Impacts

See the description of the current lobster fishery in Section V.4. This alternative would include no new effort control measures for trap gear and would carry forward measures contained in the existing Federal FMP. Increased lobster landings in recent years are probably attributed to intensified fishing effort as well as favorable environmental conditions which have enhanced egg production and larval survival. If favorable environmental conditions continue, economic revenues may remain at current levels or increase with current or increased fishing effort. An adverse change in the environment, in combination with present overfishing of the resource, could immediately jeopardize the future sustainability of the lobster industry. Fishing effort, i.e., the number of lobster traps used in the fishery, would likely continue to increase throughout the range of the resource. Per-capita costs for fishing gear acquisition and maintenance could similarly increase, resulting in decreased revenues at current lobster prices and resource abundance. The practice of setting out large numbers of traps over large areas may also be intensified, resulting in longer fishing days, tending more gear and increased operational costs. User conflicts for access to limited productive fishing grounds will likely proliferate with further effort expansion.

Alternative 2: Implement the Commission's (ISFMP Amendment 3) Recommendations in Federal Waters. This alternative was selected as the preferred action discussed in this FEIS (see Section III).

Non-Selected Alternative 3: Nearshore/Offshore Trap Limits with a Buffer Zone and Continue All Management Measures Currently in Place

This alternative would continue all current management measures contained in the Council's American lobster FMP for Federal waters and require all trap fishermen holding a Federal permit to declare, for the duration of the stock rebuilding period (through December 31, 2003), that they will fish exclusively in one of the Lobster Fishing Zones shown in Table IV.1.

Table IV.1. Potential Lobster Fishing Zones

Lobster Fishing Zone Designation	Location	Distance From Shore	Initial Trap Number
Zone A	State/EEZ Nearshore	0 - 30 miles from shore	800
Zone B	EEZ Nearshore Zone	3-30 miles from shore	800
Zone C	EEZ Offshore Zone	beyond 40 miles from shore	2000

This alternative would limit current trap effort in Federal waters by adopting in Year 1 (1999), a trap limit of 800 traps for those individuals who fish in either Zone A (EEZ and state waters combined) or Zone B and a maximum trap limit in Federal waters of 2,000 traps for those individuals who fish only in Zone C. A trap fisherman cannot declare to fish in more than one zone. The higher trap limit for the EEZ Offshore Zone is based upon the historical characterization of the fishery and recommendations contained in Amendment 3 to the ISFMP regarding lobster management in Federal waters.

This alternative would also reduce the maximum number of traps in Federal waters allowed per Federal license holder in years 2-5 (2000-2003) by implementing an annual reduction in the number of traps fished by 80 traps per year for Zone A and B and 200 traps per year for Zone C (Table IV.2). The benefits of a trap reduction strategy, with associated reductions in fishing mortality, would be fully effected only if fishing effort were reduced throughout the range of the American lobster. Management measures under this alternative apply only to vessels with Federal lobster fishing permits. Under this alternative, management measures to replace a trap reduction schedule would be considered if shown to have a conservation-equivalent benefit to the American lobster resource.

TABLE IV.2. Potential trap reduction strategy for Federal permit holders

Month/Year	Plan Year	Zone A OR B TRAP CAP (0-30 Miles from Shore)	Zone C TRAP CAP (40-200 Miles from Shore)

January, 1999	1	800	2,000
January, 2000	2	720	1,800
January, 2001	3	640	1,600
January, 2002	4	560	1,400
January, 2003	5	480	1,200

Lobster Fishing Zone Designation:

The Federal trap limit would be the maximum number of traps allowed to be fished in the EEZ by holders of Federal lobster permits based upon the number of traps fished in Federal and state waters combined. Once permit holders have declared to fish in one of the three lobster fishing zones, they would be required to remain in the selected zone for the duration of the stock rebuilding period (through December 31, 2003). If permit holders declare in Zone A, they may fish traps in Federal waters from 3 - 30 miles from shore, but this number may be no greater than 800 subtracted by the number of traps fished in state waters (0 - 3). A permit holder in this category would be required to certify the maximum number of traps fished in state waters, and would be limited to no more than 800 traps in state and Federal waters combined if the permit holder chooses to fish traps in Federal waters. Permit holders declaring in Zone B would fish the entirety of their traps, up to a maximum number of 800, in Federal waters from 3-30 miles from shore. Permit holders declaring in Zone C would be considered to be in the offshore (Zone C) lobster fishery only and may fish no more than 2,000 traps in 1999.

Lobster Buffer Zone:

Throughout the range of the resource, beginning at a distance of 30 miles from shore and extending for 10 miles, there will be a Lobster Buffer Zone (LBZ). The LBZ will require removal of all trap gear from the LBZ to effectively monitor and enforce Zone B and Zone C, the designated EEZ Nearshore and EEZ Offshore Zones, respectively. Due to the difference in trap allocations under this alternative, 800 traps versus 2000 traps, depending on the Zone declaration, there is concern of a possible shift in fishing patterns by lobster trap vessels to set gear just beyond Zone B to take advantage of the larger initial trap limit. The purpose of the LBZ is to discourage a shift in fishing patterns by requiring vessels declaring in Zone C to travel a minimum distance of 40 miles from shore before setting trap gear.

The delineation of a buffer zone extending from 30 to 40 miles from shore could enhance public understanding and alleviate enforceability concerns. Fishermen often lobby for fair and consistent enforcement. Buffer zones will clarify who is fishing under what rules, and limit contention. Further, gear conflicts are recognized by lobstermen (and other fishermen) to be an important problem - especially with increasing levels of activity on the water and improved technology which allows the use of previously inaccessible areas. Buffer zones are generally seen as a fair and reasonable way to limit such conflicts. It should be noted that lobster conservation

management teams for the inshore Gulf of Maine and (EEZ) offshore waters have been directed, under the provisions of the Commission's's ISFMP, to develop a proposal for a closed area (closed to all lobster harvest) management strategy, similar to a buffer zone approach. Alternatively, as a non-preferred option due to its complexity, the inland boundary line identified under the the Commission's ISFMP Amendment 3 for the EEZ Offshore Area (Area 3) could be considered, and extended seaward for a distance of 10 miles. This is a boundary line developed by the lobster industry and was intended to delineate EEZ nearshore areas from offshore waters (See Table IV.3).

TABLE IV.3. Potential landward boundary line for establishment of a ten-mile lobster buffer zone in EEZ waters. This area is defined by the area bounded by straight lines (rhumb lines) connecting the following points, in the order stated,

Point	Latitude	Longitude
A	43°58' N.	67°22' W.;
B	43°41' N.	68°00' W.;
C	43°12' N.	69°00' W.;
D	42°49' N.	69°40' W.;
E	42°15.5'N	69°40' W.;
F	42°10' N.	69°56' W.;
K	41°10' N.	69°06.5' W.;
N	40°45.5' N.	71°34' W.;
M	40°27.5' N.	72°14' W.;
U	40°12.5' N.	72°48.5' W.;
V	39°50' N.	73°01' W.;
X	38°39.5'N	73°40' W.;
Y	38°12'N	73°55' W.;
Z	37°12'N	74°44' W.;
ZA	35°34'N	74°51' W.;
ZB	35°14.5'N	75°31' W.;
ZC	35°14.5'N	71°24' W.;
		From pt ZC along the seaward EEZ boundary to pt A

Lobster Fishing Certificate:

To prevent uncontrolled increases in the number of traps fished by lobster vessels, Federally

permitted lobster trap fishermen would be required to designate in which Lobster Fishing Zone they intend to fish on a form provided by NMFS. To aid in enforcement and administration of the program, lobster vessel owners will be required to carry a Lobster Fishing Certificate onboard their vessel. This Certificate will identify what Lobster Fishing Zone designation the vessel is enrolled in as well as additional information on trap tags to be discussed later in this section. Given that lobster fishing is strongly territorial relative to the placement of traps, requiring declaration of a particular zone should not be problematic for lobstermen. This type of management measure conforms well with the traditional community characteristics of lobster management.

Lobster Trap Tags:

In addition to the trap reduction schedule described above, the second aspect of an effort reduction program could involve Federal lobster trap tags. Given that trap limits are one of the more accepted types of lobster management and that this measure is a way of enforcing trap limits, lobstermen should find tags a reasonable option - provided the tags are well designed. Involvement of fishermen in the design of the tags would be one way to assure this.

Federal trap tags would be issued annually and will be valid for the duration of the lobster fishing year in which they are issued. Federal permit holders (vessel owners) who declare to fish in Zone B or Zone C must request an appropriate number of uniquely numbered Federal trap tags -- up to, but not exceeding, 800 tags and 2000 tags respectively in Year One (1999). Owners that declare in Zone A must request an appropriate number of uniquely numbered Federal trap tags, minus the number of traps fished in state waters (or minus the number of state issued trap tags), not to exceed the 800 trap limit. Vessel owners would then be required to tag each lobster trap in Federal waters with one Federal tag. If the original tags are lost -- weather, gear conflicts and unforeseen events occasionally cause the loss of lobster traps -- the vessel owner must report lost tags as soon as possible after tags have been discovered missing, via letter, to the Regional Administrator (R.A.). Either at the same time or at a future date within the same fishing year, the vessel owner may request replacement tags, including with that request a check for the cost of the replacement tags. The use of a restricted number of tags will prevent uncontrolled increases in numbers of traps used by vessel operators. This provision can only be implemented by requiring that lobster vessel owners submit an additional form electing their Lobster Fishing Zone designation on the Lobster Fishing Certificate (described above). Additionally, on that same form, vessel owners will request an appropriate number of Federal trap tags and send a check for the cost of the tags. In subsequent years, trap tags will be part of the annual permit renewal application, while the initial Lobster Fishing Zone designation will not be subject to change for the duration of the stock rebuilding period (through December 31, 2003).

(1) Effects on Lobster

It is difficult to quantify the degree to which this action would end overfishing. However, NMFS believes that an initial 800/2000 trap limitation (vs. the initial 1200 trap cap approved by the

Commission) with implementation of further effort control or conservation equivalent measures to increase egg production, will effectively begin to increase the effectiveness of other management measures proposed in the ISFMP as larger lobsters recruit to the population. The ultimate success of this alternative will likely depend upon the adoption of complementary effort reduction measures in waters under coastal state jurisdiction. In this regard, cumulative action by NMFS and the states to effectively reduce fishing effort will have the added benefit of enhancing the effectiveness of other management measures.

There are other benefits to be gained from a reduction in the number of traps. The establishment of an 800 and 2000 trap "cap" for Zones A / B and C, respectively, will freeze proliferation of fishing effort beyond those levels and halt associated elevations in American lobster mortality. The raw number of traps is only one component of effective fishing effort. The number of trap hauls and average soak times are more important measures of effort. Due to the quantity of gear in the water, current fishing patterns do not allow the industry to optimize the effectiveness of their traps. NMFS recognizes that a reduction in the number of traps could lead to increased efficiency of the remaining ones, possibly to the extent that lobster mortality rates could increase. However, this alternative proposes a continued phased reduction in trap numbers over a four-year period to offset the potential for increased trap efficiency as trap numbers are reduced. Notwithstanding that the states, through the Commission, have not yet adopted the specific details of a long-term trap reduction strategy advocated by NMFS to end overfishing, this option provides an approach to foster continuation of state/Federal communications for achieving the ISFMP objectives. The degree to which trap reduction and other measures in the EEZ under this alternative will end overfishing on American lobster throughout its range largely depends upon commitment by the Commission and the States to take timely effective action in preventing overfishing in state waters.

(2) Effects on Environment

The capping and reduction in number of lobster traps over a four-year period under this alternative could result in increased undisturbed habitat for the American lobster. Some areas, including the Lobster Buffer Zone (30-40 miles from shore) will be freed from lobster traps, and thus could become, or return to, lobster refuge. The practice of setting out large numbers of traps over large areas would also be reduced, thereby enhancing the availability of undisturbed habitat, and reducing the prevalence of "ghost gear" which is often the result of user conflicts and/or storms.

(3) Effects on Marine Mammals and Sea Turtles

Trap Reduction

This alternative is designed to reduce the amount of lobster pot gear in the EEZ. Because whales and sea turtles are known to become entangled in the buoy lines and/or groundlines of lobster pot gear, a widespread reduction in the concentration of gear in the EEZ will directly reduce the risk

of entanglement per unit of fishing effort in the EEZ. Because the distribution of whales and sea turtles does not fully overlap the areas where gear is deployed, a linear relationship between trap reduction and entanglement risk reduction cannot be assumed. A reduction in the amount of lobster pot gear was discussed by the Atlantic Large Whale Take Reduction Team, which recognized the potential for risk reduction through effort control and changes in fishing practices. In addition, trap reduction was recommended by many lobstermen submitting written and oral testimony during the comment period for the proposed regulations to implement the ALWTRP. Several lobstermen recommended trap limits even lower than those proposed for the first several years of lobster trap reduction in this action. Commenters also suggested that NMFS include lobster effort reduction directly in the ALWTRP as a primary take reduction measure.

In addition to the risk reduction expected per unit of fishing effort, there are secondary effects resulting from reduced concentrations of gear in the EEZ. Since whales and turtles entangled in a single lobster pot or trawl occasionally drag the gear and become entangled in one or more additional pieces of lobster gear, the trap reduction program could represent a significant reduction in the risk of multiple entanglements. This could also alleviate multiple entanglements involving gear from other fisheries or anchor lines. The action should reduce the risk that buoy lines or ground lines of adjacent sets of gear will become snarled and reduce chances of gear being set on top of another boat's gear, which would then reduce entanglement risks associated with higher profile of the line resulting from the disruption as well as reduce the potential that an animal will become entangled in the snarled gear.

Several changes in fishing practices which could benefit protected species may occur. A reduction in the number of traps per permittee should result in a reduction in the practice of prospecting, where extra traps are set to detect movements of lobsters. Trap reduction may result in more frequent tending, which could increase the chance that a vessel would observe any entanglements that did occur. Decreased soak time could also directly reduce entanglement risk for sea turtles, particularly for leatherback turtles, which may be attracted to the algae and any gelatinous organisms that collect on buoys and buoy lines.

Trap reduction could also beneficially affect the marine habitat. Widespread trap reduction would decrease the intrusion of gear into cetacean and turtle habitat and free up margins of habitat from which these species are currently physically excluded due to the presence of gear and vessels working that gear. Since the fishery as currently operated results in ghost gear due to gear conflicts, storms, and other factors, reducing the overall number of traps should also reduce the prevalence of ghost gear, which should benefit all biota.

This alternative could result in less risk reduction than the two-tier alternative (Alternative 4) since this alternative could allow an increase in the number of traps deployed in Year 1 for vessels fishing fewer than 800/2000 and will not represent risk reduction for those vessels currently fishing less than the maximum allowed in any of the 5 years of the plan. Although the number of traps may increase in the first year, subsequent plan years should result in an overall decrease.

It is conceivable that some vessels will elect to forego or curtail fishing in the EEZ under the Federal trap limits in favor of fishing in state waters if that state does not have a limit or has a more favorable limit. Thus, the Federal limit may result in an effort shift into state waters, increasing the entanglement risk in state waters. It is likely that this effect would be minimal during the first year of the trap reduction program and the relative risk would become more pronounced as the Federal limit decreases in out years. The effect would probably be localized, *i.e.*, limited to areas where there is available fishing area in state waters. In states with lower trap limits, an influx of new traps from vessels who currently fish all or most of their gear in Federal waters could counteract state reduction efforts. Under that scenario, there would be limited net risk reduction for protected species in state waters.

Lobster Fishing Zone Designation

The proposal to include a single trap allocation for vessels regardless of whether they fish in both state and Federal waters may result in reduced effort in Federal waters by some vessels if they choose to use their entire limit in state waters. The creation of the three zones and the 10-mile buffer zone could reduce or eliminate the practice of bringing gear in closer to shore for storage during certain times of the year, although this practice has been curtailed under the Atlantic Large Whale Take Reduction Plan already. A "stored gear" component to the fishery is considered to have a higher risk than an active fishery because vessels are not tending gear and are therefore not likely to observe entanglements in their gear or another vessel's gear. For the most part, it is not possible to distinguish between impacts of defining the buffer zone based on a set distance from shore versus using the existing definition of the Area 3 management line in the Commission's Amendment 3 provisions. However, the use of the Area 3 line is consistent with the inshore/offshore division used in the ALWTRP interim final regulations.

Buffer Zone

The inclusion of a buffer zone could increase the potential for entanglement on the boundaries, but entanglement risk from lobster pot gear would be eliminated in the buffer zone itself. Prohibiting a pot fishery in the buffer zone would decrease the potential for ghost gear due to gear conflict with the mobile sector in the buffer zone.

Lobster Fishing Certificate

This provision is not expected to affect protected species.

Lobster Trap Tags and Future Mandatory Reporting

An individual trap tag system would provide useful information for identifying and managing risks to cetaceans and turtles from the lobster pot fishery. The trap tag system may also increase

compliance with the trap limits, thereby increasing the potential effectiveness of that measure in reducing entanglement risk. The inclusion of a trap tag program is also likely to increase compliance with ALWTRP provisions, because gear inspected for compliance with lobster regulations must also be in compliance with ALWTRP regulations. The inclusion of a mandatory reporting system would greatly increase the precision of protected species management efforts, particularly if this system is developed jointly with state systems.

(4) Social/Cultural and Economic Impacts

The capping and reduction in number of fish traps over the four-year stock rebuilding period could reduce gross revenues for some portion of the lobster industry. Ultimately, however, this alternative could result in gross economic benefits ranging between $11.5 and $70.2 million, with higher benefits accruing to the industry if state jurisdictions were to implement complementary regulations throughout the range of the resource. The economic benefits include the joint benefit of gains in industry revenues and reduced capital costs. A cap and reduction of fishing effort could also help alleviate user conflicts for productive fishing grounds among trap fishermen and lessen gear conflicts between fixed and mobile gear fisheries. A higher trap limit for Federal permit holders in the offshore EEZ fishery strives to maintain the historical character and economics of that industry sector. In the worst case scenario, absence of effort control by state jurisdictions could result in voluntary cancellation of permits by Federal permit holders, and transfer of increased fishing effort to state waters, thereby intensifying overexploitation of American lobster in coastal areas. However, assuming that the states and NMFS will work in partnership to implement effort control measures under the ACFCMA, and in view of the Commission's expressed intent to immediately begin development of additional measures to address overfishing with implementation beginning in 1998, there is optimism that potential economic benefits can be achieved under this alternative. Additionally, the associated measures enable future consideration of actions to address specific social and cultural issues faced by the industry on an area by area basis, e.g., through collaboration with the industry's conservation management teams identified in Amendment 3 to the ISFMP.

There would be 492 trap vessels affected by the 480 trap cap in year five. The majority are still small to mid-sized, though some very small vessels are affected at this limit (Tables IV.4 and IV.5). At this level, Rhode Island is no longer the most affected state. Impacts are heaviest in Massachusetts and Maine, followed by Rhode Island and then New Jersey (Table IV.6). In Massachusetts the only primary ports with 10 or more affected vessels are Gloucester (33 vessels), Beverly (13), Boston (12), Westport (12), and Plymouth (10). In Maine only Portland (14) has more than 10 affected vessels. In Rhode Island, Point Judith (44) and Newport (11) have the heaviest concentrations, while in New Jersey only Belford (12) exceeds 10 affected vessels.

Some of these vessels have other Federal permits, though as restrictions in these other fisheries increase many appear to be letting those permits expire (Table IV.7). Some black sea bass and

scup pot fishermen especially in New York and New Jersey take lobsters as a bycatch. Though more commonly an offshore activity, some of these 492 vessels do possess black sea bass and scup permits and may in fact be primarily targeting those species. With their target species quotas reduced, this industry sector will likely be looking to bycatch species (such as lobster) for more of their income.

Table IV.4 Length Data for Trap Vessels Impacted by 480 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Length for All Trap Vessels Impacted by 480 Trap Cap	**Number of Trap Vessels Impacted by 480 Trap Cap and in Various Length Categories**				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
38 feet	28	430	34	0	0

Table IV.5 Tonnage Data for Trap Vessels Impacted by 480 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Trap Vessels Impacted by 480 Trap Cap	**Number of Trap Vessels Impacted by 480 Trap Cap and in Various Tonnage Categories**			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
16 GRT	18	474	0	0

Table IV.6 Number of Trap Vessels Impacted by 480 Trap Cap and by Primary Port State holding 1996 Commercial Federal Lobster Permits

CT	**DE**	**MA**	**MD**	**ME**	**NH**	**NJ**	**NY**	**RI**	**Other**
5	3	171	3	159	11	40	11	87	2

Table IV.7 Numbers of Commercial Federal Lobster Permitted Trap Vessels Impacted by 480 Trap Cap and holding Different Types of Other Federal Permits

	Multispecies	**Summer Flounder**	**Squid/ Mackerel/ Butterfish**	**Atlantic Sea Scallops**	**Black Sea Bass**	**Scup**
1996	363	32	240	217	*	*
1997	193	21	94	131	20	25

* Black sea bass and scup did not come under Federal permitting until 1997.

The 1200 trap cap for year five would affect 51 vessels. They are primarily large vessels (Tables IV.8 and IV.9) that claim primary ports of landing in Rhode Island and Massachusetts (Table

IV.10). No single primary port shows as many as 10 vessels affected. Some have permits in other Federal fisheries, though the numbers of these fishermen holding other permits are decreasing (Table IV.11).

Table IV.8 Length Data for Trap Vessels Impacted by 1200 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Length for All Trap Vessels Impacted by 1200 Trap Cap	**Number of Trap Vessels Impacted by 1200 Trap Cap and in Various Length Categories**				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
68 feet	0	0	14	37	0

Table IV.9 Tonnage Data for Trap Vessels Impacted by 1200 Trap Cap with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Trap Vessels Impacted by 1200 Trap Cap	**Number of Trap Vessels Impacted by 1200 Trap Cap and in Various Tonnage Categories**			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
86 GRT	0	11	36	4

Table IV.10 Number of Trap Vessels Impacted by 1200 Trap Cap and by Primary Port State holding 1996 Commercial Federal Lobster Permits

MA	**NH**	**NJ**	**RI**	**Other**
16	4	3	27	1

Table IV.11 Numbers of Commercial Federal Lobster Permitted Trap Vessels Impacted by 1200 Trap Cap and holding Different Types of Other Federal Permits

	Multispecies	**Summer Flounder**	**Squid/ Mackerel/ Butterfish**	**Atlantic Sea Scallops**	**Black Sea Bass**	**Scup**
1996	45	10	28	18		
1997	11	1	4	13	1	1

N.B. Black sea bass and scup did not come under Federal permitting until 1997.

Non-Selected Alternative 4: Four-tier Nearshore/Offshore Trap Limit with a Buffer Zone

There has been concern that trap fishermen fishing significantly less than 800 traps (especially less than 400 traps) could increase effort under the 800/2000 Trap Cap Alternative. NMFS anticipates that this concern is more germane to trap fisheries in certain state waters, and may not be

necessarily applicable to the EEZ. Nevertheless, because the issue is often raised, public comments are being requested on this alternative.

One way to alleviate concern over the potential for increased effort would be to require all Federal lobster permit holders fishing traps to certify the number of traps they actually fished in 1997. Permit holders who have elected either Lobster Fishing Zone A or Zone B and certified their number of traps fished in 1997 was less than 400, would be limited to a maximum of 400 traps in Year One (1999). Permit holders who have elected either Zone A or Zone B and have certified their number of traps fished in 1997 was greater than 400, would be limited to a maximum of 800 traps in Year One (1999).

A similar strategy would apply to the offshore fleet for vessels fishing less than 1000 traps. Permit holders who have elected Zone C and certified their number of traps fished in 1997 was less than 1000, would be limited to a maximum of 1000 traps in Year One (1999). Permit holders who have elected Zone C and certified their number of traps fished in 1997 was greater than 1000, would be limited to a maximum of 2000 traps in Year One (1999).

Under this alternative, all Federal permit holders fishing traps would be required to implement an annual reduction in the number of traps fished in Years 2-5 (2000-2003). Federal lobster permit holders who have elected either Zone A or Zone B and were limited to a maximum of 400 traps in Year One (1999), would reduce the maximum number of traps allowed by 40 traps per year for Years 2-5. Permit holders who have elected either Zone A or Zone B and were limited to a maximum of 800 traps in Year One (1999), would reduce the maximum number of traps allowed by 80 traps per year for Years 2-5. Permit holders who have elected Zone C and were limited to a maximum of 1000 traps in Year One (1999) would reduce the maximum number of traps allowed by 100 traps per year for Years 2-5. For Federal lobster permit holders who have elected Zone C and were limited to a maximum of 2000 traps in Year One (1999) would reduce the maximum number of traps allowed by 200 traps per year for Years 2-5 (See Table IV.12 for a tabular description of this two-tier system).

As with alternative 3, there would be a Lobster Buffer Zone, and trap tagging requirement. This proposal is presented as an alternative with the intent of seeking public comments on such an option. It would involve an increased administrative and enforcement burden required by a 400/800 and 1000/2000 trap cap certification, verification, and implementation process compared to Alternative 3.

TABLE IV.12. Four-tier trap reduction strategy under Alternative 4

Month/Year	Plan Year	Zone A OR B TRAP CAP (3-30 Miles from Shore)		Zone C TRAP CAP (40-200 Miles from Shore)	
		Certified fishing		Certified fishing	
		less than 400 traps	more than 400 traps	less than 1000 Traps	more than 1000 Traps

January, 1999	1	400	800	1000	2,000
January, 2000	2	360	720	900	1,800
January, 2001	3	320	640	800	1,600
January, 2002	4	280	560	700	1,400
January, 2003	5	240	480	600	1,200

(1) Effects on Lobster

The number of lobster traps employed in the fishery under this alternative would likely result in decreased fishing effort on the American lobster compared to Alternative 3. Accordingly, this option could do more to end overfishing and restore the stocks of American lobster over a shorter time period.

(2) Effects on Environment

This alternative could potentially reduce the number of lobster traps in the marine environment compared to Alternative 3, and thus increase the amount of lobster bottom for lobster refuge.

(3) Effects on Marine Mammals and Sea Turtles

The initial trap allocation under this option will start at either 400 or 800 traps for the nearshore fishery and 1000 or 2000 traps for the offshore fishery, based on certification by each vessel of the number of traps fished in 1997. Thus this option has greater flexibility to control the number of traps in Year 1 than Alternative 3 and could more precisely limit the potential for vessels to increase traps beyond current practice in subsequent plan years. Because there is less potential for increase in number of traps currently fished -- and therefore less chance of increased entanglement risk in any plan year -- this option has the potential to effect a quicker conservation benefit for protected species than Alternative 3. In addition, there is a potential to achieve greater reduction in the total number of traps in the fishery at the end of the reduction schedule than under the Alternative 3.

See discussion under impacts of Alternative 3 for additional information on potential adverse effects of effort shifts resulting from different trap limits in Federal and state waters.

(4) Social/Cultural and Economic Impacts

The intent of this alternative, compared to Alternative 3, is to more effectively maintain the historical proportion of fishing effort during the stock rebuilding period on a fishing vessel by vessel basis. The four-tier determination of trap caps for the nearshore and offshore EEZ fishery

could thereby prevent an undesired and otherwise "allowable" expansion of fishing effort which could potentially change the relative social and economic characteristics of the industry. However, it is difficult to predict how well this approach would succeed in the absence of an accurate way to certify the past amounts of pots fished; conceivably, many fishermen may try to be certified for the highest amount to maintain an initial high trap limit to reduce future impacts from the lobster stock rebuilding/trap reduction schedule. Establishing lower trap limits for smaller scale fishermen might also create conflicts in fishing behavior between those with fewer than 400 traps and those fishermen with more than 400 traps.

Non-Selected Alternative 5: Nearshore Fixed Trap Limits/Offshore Historic Participation

Federal lobster permit holders fishing traps will be required to designate which Lobster Fishing Zone they intend to fish, Zone A, Zone B, or Zone C, as previously described in Alternative 3.

Zone A and Zone B:

Under this alternative, permit holders declaring their intent to fish in Zone A or Zone B will be required to limit current trap effort by adopting in Year One (1999) a trap limit of 800 traps. For Zone A and Zone B participants, this is the same as Alternative 3. During the stock rebuilding period in Years 2-5 (2000-2003), permit holders will reduce the maximum number of traps allowed by implementing an annual reduction in the number of traps fished by 80 traps per year. In subsequent years of the stock rebuilding period, an historically based trap allocation program would be given strong consideration for the nearshore component of the fleet. Refer to the description for Zone C permit holders described below for details of a potential historically based trap allocation program.

Zone C:

Federal lobster permit holders declaring their intent to fish in Zone C will be given a percentage of their historic trap levels in Year One with a structured decrease in the maximum number of traps fished in Years 2-5. Under this alternative, permit holders possessing documentation (by the best available records) with regard to specific trap levels over a defined period will be assigned 75% of their average annual history based trap level as the initial annual allocation in Year One. In subsequent Years 2-5, annual allocations to Federal lobster permit holders in Zone C will be reduced by 10% of their initial Year One allocation on an annual basis. For example: A permit holder can document fishing 3000 traps during the defined documentation period. The Year One allocation would be 2250 traps (75% of 3000 traps). In subsequent Years 2-5 of the stock rebuilding period the permit holder would be required to reduce, on a yearly basis, the maximum number of traps fished by 225 traps (10% of 2250).

At the end of the rebuilding period, trap allocation levels will be maintained, but may be subject to adjustment consistent with the most recently available quantitative stock assessment. Permit holders will be subject to the common restrictions (including minimum size limits, escape vents or

other restrictions) as appropriate.

Documentation to support the initial history based trap allocation for Zone C could require:

a sworn affidavit attesting to the number of traps fished in the defined qualification period,

and/or supporting documentation such as proof of trap purchases,

and/or number of traps fished or hauled, established on the basis of information from logbooks, or other information.

and/or ten traps per foot of boat length,

and/or the number of traps indicated in Federal lobster vessel permit applications for the year 1992.

(1) Effects on Lobster

The number of lobster traps under this alternative will likely increase in the offshore EEZ waters compared to Alternative 3. Accordingly, it would likely contribute to higher lobster mortality levels, thereby prolonging the achievement of lobster management goals throughout the range of the resource.

(2) Effects on Environment

This alternative, due to the increased number of lobster traps in the EEZ compared to Alternative 3, would potentially decrease the availability of American lobster refuge areas and undisturbed habitat.

(3) Effects on Marine Mammals and Sea Turtles

Impacts for Zones A and B would be similar to those under the Alternative 3. For Zone C, vessels could be allocated a higher number than traps than under Alternative 3, and the overall reduction for those vessels would then be less at the end of the reduction schedule. Therefore, this alternative will offer less protection from entanglement risk than Alternative 3. See discussion under impacts of Alternative 3 for additional information of potential adverse effects of effort shifts resulting from different trap limits in Federal and state waters.

(4) Social/Cultural and Economic Impacts

This alternative would alleviate the social and economic impacts of a trap reduction schedule for the offshore EEZ fishery (and potentially, for the inshore EEZ fishery during future years), similar to Alternative 3. It is predicated upon the historical and economic nature of the offshore EEZ trap

fishery as well as upon previous recommendations made by industry groups and during the public comment period on the Notice of Intent to prepare the draft EIS. However, as under Alternative 4, it is difficult to predict how well this approach would succeed in the absence of an accurate and industry-accepted way to certify previous levels of fishing effort on a vessel by vessel basis.

Non-Selected Alternative 6: Ban Fishing for and Possession of Lobster

This alternative would require removal of all trap gear and closure of the EEZ to fishing for, and possession of, lobster by any fishing vessel for an extended period of time until lobster stocks recover throughout their range. Revisions to the MSA by the SFA requires assertive actions to end overfishing and begin a stock rebuilding program in waters under Federal jurisdiction. Approximately 80% of American lobster is harvested from within state waters whereas only about 20% is harvested from Federal waters, and an EEZ closure alone will not end overfishing. This action, however, would constitute the maximum protection possible by the Federal government to prevent overfishing in the EEZ. This action would be much easier to enforce than any other alternative considered here.

(1) Effects on Lobster

The prohibition on fishing for or possession of lobster under this alternative would afford the maximum protection possible under Federal law for attempting to end overfishing in the EEZ and rebuilding the portion of the American lobster population which occurs in waters under Federal jurisdiction. It would create a refuge for lobster that might mitigate the effects of overfishing in coastal areas. However, an EEZ closure to lobster fishing could also result in the transfer of fishing effort to state waters. The resultant potential disruption to the existing inshore fishery could exacerbate the attainment of lobster restoration objectives.

(2) Effects on Environment

The prohibition on fishing for lobster under this alternative would provide the maximum benefit possible in enhancing the increased availability of undisturbed habitat and refuge for American lobster in the EEZ.

(3) Effects on Marine Mammals and Sea Turtles

Removal of trap gear targeting lobster from the EEZ for an extended period of time and banning fishing for and possession of lobster in the EEZ by all gear types would provide maximum protection from entanglement risk presented by all gear types targeting lobster in the EEZ waters during that period, and in balance, would be expected to have a positive effect on the conservation of protected species relative to the other alternatives considered here. However, entanglement risk would be likely to increase in territorial waters - in particular just inside the 3-mile line -- due to potential influx from the EEZ of any gear types known to entangle protected species. In addition to the entanglement risk, protected species could be excluded from the

territorial water habitat due to higher densities of gear targeting lobster. Other effects of increased gear density could include increased frequency of gear snarls and lost gear resulting in ghost gear and effects on the habitat itself. This type of effort shift could have significant impact on protected species, particularly northern right whales and sea turtles. Effects could be most acute in the Cape Cod Bay area, where both right whales and sea turtles are found in very shallow water.

(4) Social/Cultural and Economic Impacts

This alternative would prohibit the fishing for, and retention of, American lobster in the EEZ, which presently accounts for approximately 20% of total annual landings. This prohibition would impact the income-generating activities of 3,153 vessel owners who currently hold Federal lobster permits. There are approximately 100 vessels which target lobsters with lobster traps in the offshore EEZ, mainly in the canyon areas. A ban on the possession of lobster would likely put an unknown proportion of these vessels out of business and result in unemployment of vessel crews.

Any action to limit fishing activities on lobster can result in shifting of effort to other fisheries. For example, of the 3,153 vessel owners who hold Federal lobster permits, 1,984 (63%) also hold at least one other Federal permit. The extent to which fishing behavior will increase exploitation on other fishery resources as a result of lobster fishing restrictions is unquantifiable. This alternative would likely result in an increased potential to cause a substantive shift of effort to other EEZ, as well as inshore fisheries.

Similarly, this alternative could have severe economic consequences on the lobster bait fisheries, e.g., the Maine herring industry which derives income from sale of whole fish by herring fishermen, or herring cuttings by sardine factories, as bait to lobster trap fishermen.

3. Alternatives Considered for the Non-Trap/Pot Lobster Fishery

Alternative 1: Landings by fishermen using gear or methods other than traps will be limited to 100 lobsters (or parts thereof) for each fishing trip of 24 hours or less duration (up to a maximum of 500 lobsters (or parts thereof) during any 5-day period); or 500 lobsters (or parts thereof) for a fishing trip of 5 days or longer, unless further restricted by another FMP/Status Quo.

This alternative was clarified to specifically denote a landing limit of 100 lobsters (or parts thereof) per day, up to a maximum of 500 lobsters per trip of five or more days, and is included in the preferred management action described in Section III.

Non-Selected Alternative 2: Landings by fishermen using gear or methods other than traps (non-trap fishermen) will be limited to no more than a maximum of 500 lobsters per trip, regardless of trip length, unless further restricted by another FMP.

Non-trap gear continues to be a very difficult issue within the industry. There is concern of

potential increases in effort from redirection of effort from other fisheries, or shoreside industries. Landings over the 1994-1996 period indicate that approximately 2.2% of lobsters have been landed by the non-trap sector. A review of landings over the ten year period 1984-1994, showed an average of 2.3% of lobster landings were taken by methods other than traps or pots. A limit of 500 lobsters per trip should maintain harvest of lobsters by the non-trap fishery within the historical proportion of total coastal lobster landings.

(1) Effects on Lobster

Harvest of American lobster by methods other than pots or traps would be maintained at historical harvest levels.

(2) Effects on Environment

There would be no substantive impact on the environment.

(3) Effects on Marine Mammals and Sea Turtles

See Section III.5.

(4) Social/Cultural and Economic Impacts

This alternative would prevent a proliferation in harvest of American lobster by methods other than pots or traps. During the years 1994-1996, this harvest represented 1.8 percent, 3.0 percent, and 1.7 percent of total lobster landings. Accordingly, historical levels of harvest are not anticipated to be substantively impacted under this alternative, resulting in no net decrease in revenues for 89% of participants in this fishery.

Non-Selected Alternative 3: Ban Fishing for and Possession of Lobster

This alternative would prohibit the fishing for and possession of lobster in the EEZ by all methods of fishing for an extended period of time until lobster stocks recover throughout their range.

(1) Effects on Lobster

A ban on fishing for lobster by mobile gear vessels would also have some unquantifiable benefit in increasing survival of lobsters that would otherwise have been harvested and/or returned to the water due to minimum size regulations. Previous studies on impacts of mobile gear on lobster injury and/or survival have been inconclusive; frequency of injury ranged from seven percent to seventy-five percent of captured lobsters and primarily involved loss or damage to the chelae (claws). Rate of injury has been demonstrated to be higher during the lobster molting season.

(2) Effects on Environment

This alternative would provide the maximum benefit possible in enhancing the increased availablility of undisturbed habitat and refuge for American lobster in the EEZ.

(3) Effects on Marine Mammals and Sea Turtles

Since protected species have been taken in non-trap gear types used to target lobster, closure of the EEZ to these gear types for an extended period of time would provide maximum protection from entanglement risk presented by non-trap gear targeting lobster in EEZ waters during that period. Under this alternative, entanglement risk would be likely increased in territorial waters -- in particular just inside the 3-mile line -- due to potential influx from the EEZ of any gear types known to entangle protected species. These effects would be minimal at first because there will be limited space available in state waters for additional effort, but non-trap effort could increase in the latter years of the trap reduction plan as the concentration of trap gear decreases in state waters. Other effects of increased non-trap effort in state waters could include increased frequency of gear conflicts, gear snarls and lost gear resulting in ghost gear and consequent increases in entanglement risks and effects on the habitat itself.

(4) Social/Cultural and Economic Impacts

This option would prohibit fishing for, and retention of lobsters taken by gear other than pots or traps in the EEZ. Harvest by this sector accounts for approximately 2.2% of total annual lobster landings. It would impact notably mobile gears (trawls and dredges), but also other gear types as well, including floating traps, diving gear, longline, handline, and gill net. During the 1996 calendar year, 901 Federal lobster permit holders utilized mobile gear to harvest finfish or shellfish; of these, approximately 21 vessels (2.3%) would likely be severely impacted by an EEZ closure to lobster harvest.

A majority of Federal lobster permit holders also possess Federal fishing permits for scup, black sea bass, summer flounder, sea scallops, and squid/mackerel/butterfish. Regulations to prohibit capture of lobster by mobile gear could concurrently impose restrictions and economic consequences in other fisheries which harvest lobster as a bycatch.

V. AFFECTED ENVIRONMENT

1. Introduction

The affected environment was fully described in 1994 as a part of Amendment 5 to the Council's FMP. Many of the following sections are not changed or updated since that amendment, and are noted in each section. Several significant changes or potential changes are:

- a review of American lobster habitat requirements
- a review of the population dynamics of American lobster

- an updated description of the lobster fishery

- an updated reference on marine mammal and sea turtle population status and review of recent protected species management actions which affect the lobster fishery.

2. Physical Environment

The physical environment of the American lobster is the same as that described in Section VIII.B of the Council's FMP Amendment 5 and Section 1.4 of the ISFMP. A review of habitat requirements for this species and its responses to contaminant exposures was published in July 1994. This review concluded that lobsters respond differently to a variety of environmental conditions and contaminants based upon life stage. Larvae are generally less tolerant than juveniles and adults to environmental extremes or contaminant exposure. This review summarized literature on (1) habitat requirements of the American lobster, (2) effects of various contaminants on lobster biology as shown in laboratory and field exposures, and (3) contaminant concentrations measured in tissues of field-collected animals. This publication, NOAA Technical Memorandum NMFS-NE-105, is available from the Research Communications Unit, NMFS Northeast Fisheries Science Center, Woods Hole, MA.

3. Biological Environment

The biological environment of the American lobster is similar to that described in Section VIII.C of the Council's FMP Amendment 5.

- **Stock Assessment**

  An updated stock assessment on American lobster has since been conducted in June 1996 (Stock Assessment Workshop No. 22) by state and Federal scientists. This workshop concluded that the American lobster resource is overfished throughout its range, with a high risk of a sharp decline in resource abundance in all three stock assessment areas. In July 1996, a report on the population dynamics of American lobster, prepared by an independent panel of stock assessment experts ("The Bannister Report"), confirmed the overfished status of American lobster stocks and advocated a reduction of fishing effort to minimize the potential for stock collapse. The panel concluded that the increase in United States landings is most likely due to a combination of increased fishing effort (including intensified fishing on previously lightly exploited offshore stocks) and increased recruitment. The increased recruitment levels may be due to favorable temperature conditions, but the precise effects (whether on for example growth, age of maturity, larval survival, or extent of settlement) have not been elaborated. However, fishing mortality is high enough for the lobster fishery to be considered overfished throughout its range by definition, and despite the recent increase in lobster abundance, fishing is removing an unacceptably high proportion of each

recruitment (year class).

A difficulty in lobster management is that a stock collapse or fishery failure would only be detectable five or six years later because of the time taken for lobsters to reach legal size. Evidence from case studies in other fisheries demonstrates that it is too dangerous and costly to wait until recruitment collapses, then try to reduce effort and rebuild the stock. The panel concluded that pragmatic action to reduce fishing effort immediately in the lobster fishery will help reduce the risk of stock collapse, and help preserve existing social and economic order in the lobster fishery.

- **Relationship to Other Species**

  - **Bycatch**

    Bycatch of black sea bass, scup, jonah crab, red crab, and conger eel are associated either directly or indirectly with the lobster trap fisheries. This bycatch is further described in Section V.4.

  - **Marine Mammals and Sea Turtles**

Current References for Population Status and Impact Analyses

Entanglements of several species of marine mammals and sea turtles in lobster pot gear have been documented. Marine mammal species known to become entangled in lobster gear include the northern right whale (*Eubalaena glacialis)*, humpback whale (*Megaptera novaeangliae)*, fin whale (*Balaenoptera physalus)*, minke whale (*Balaenoptera acutorostrata*), blue whale (*Balaenoptera musculus*), sperm whale (*Physeter catodon*), and harbor seal (*Phoca vitulina*). Sea turtle species known to become entangled in lobster pot gear include the leatherback turtle (*Dermochelys coriacea*) and loggerhead turtle (*Caretta caretta*). Several protected species status reviews and environmental impact documents prepared by regulatory agencies have bearing on this assessment of the potential impacts of the possible lobster management actions under ACFCMA on marine mammals and sea turtles. Those analyses are listed below and incorporated by reference.

Recent Population Status Reviews

Pursuant to Section 117 of the Marine Mammal Protection Act (MMPA), NMFS has prepared a stock assessment report for all marine mammal species in the U.S. Atlantic Ocean and Gulf of Mexico. The initial stock assessments were presented in Blaylock, *et al.* (1995) and are updated in Waring, *et al. (1999)*. The report presents information on stock definition and geographic range, population size and productivity rates, and known impacts.

The most recent information on sea turtle status is contained in the 1995, 1997, and 1998 status reviews of listed turtles prepared jointly by NMFS and the U.S. Fish and Wildlife Service (NMFS and USFWS 1995, 1997, and 1998).

Protected Species Impact Analyses

An assessment of impacts of the lobster fishery on endangered and threatened species of whales, sea turtles, and fish was presented in the draft supplemental environmental impact statement prepared by the NEFMC and subsequent NMFS Biological Opinion regarding Amendment 5 to the lobster FMP (NEFMC 1994 and NMFS 1994, respectively). Additional discussion was provided in the environmental assessment (EA) and Regulatory Impact Review prepared regarding the proposed rule to withdraw the Federal lobster FMP (NMFS 1996a), the EA prepared for the emergency Marine Mammal Protection Act (MMPA) regulations restricting the lobster pot fishery in the northeast right whale critical habitat areas (NMFS 1997a), the EA and subsequent Biological Opinion prepared for the Atlantic Large Whale Take Reduction Plan (NMFS 1997b and c, respectively) interim final rule, and the NMFS Biological Opinion regarding current rulemaking to implement management measures and transfer authority from the Magnuson-Stevens Act to the ACFCMA (1998).

Impact of Protected Species Management Actions on the American Lobster Fishery

Endangered Species Management

These consultations assessed the impacts of Federal lobster management actions on endangered and threatened species of whales, sea turtles, and fish under NMFS jurisdiction as well as impacts on critical habitat areas designated for the northern right whale. NMFS has determined that the operation of the lobster pot fishery has resulted in takes of endangered and threatened whales and sea turtles. At this time, no regulations have been issued explicitly to address impacts of the lobster fishery on sea turtles; however, regulatory action has been taken to protect large whales.

The Section 7 consultation on Amendment 5 to the lobster FMP was concluded with a Biological Opinion issued on March 23, 1994. That opinion stated that the lobster pot fishery may affect but was not likely to jeopardize the endangered and threatened species of whales, sea turtles, and fish under NMFS jurisdiction. In 1996, the Section 7 consultation was reinitiated based on new information regarding impacts to the right whale population. On December 13, 1996, NMFS completed a Section 7 consultation on the lobster FMP which concluded that the fishery was likely to jeopardize the continued existence of the northern right whale. This consultation required NMFS to implement a reasonable and prudent alternative to remove the threat of jeopardy from the lobster fishery. On April 4, 1997, NMFS issued emergency regulations to restrict the lobster fishery in the right whale critical habitat areas designated in Cape Cod Bay and the Great South Channel during periods of peak right whale abundance. The emergency measures were incorporated in MMPA rulemaking described below; therefore, impacts from these measures on the lobster fishery are outlined in that discussion.

It is important to note that differences in seasonal distribution patterns between marine mammals and sea turtles may result in different entanglement rates in any given month. For example, the most restrictive measures designed to protect northern right whales have been implemented in critical habitat areas such as Cape Cod Bay during the winter and early spring, when right whales are most likely to be in the area in significant numbers. The concentration of lobster pot gear in the Bay during that time is low relative to other times of the year. However, sea turtle abundance in the Bay is greatest in the summer and early fall, when lobster gear is at a much higher density. Thus, conservation measures implemented in any given month will not have uniform benefits to all protected species.

Other Marine Mammal Management Issues

As required by Section 118 of the MMPA, NMFS issues an annual List of Fisheries (LOF), which classifies U.S. fisheries according to the rate of serious injury and mortality of marine mammal stocks incidental to each fishery. Rates are quantified relative to the Potential Biological Removal (PBR) level assigned for each mammal stock. (The PBR is a number of animals which can be removed from a stock annually by human activities without preventing that stock from reaching or maintaining its optimum sustainable population size.) Fisheries are placed in one of three categories, with Category I representing the highest level of take (50% or more of the PBR). In the 1997 LOF, NMFS determined that the operation of the lobster pot fishery resulted in serious injury or mortality of northern right whales, humpback whales, and minke whales during the 1990-1994 period. Entanglements of other whale species in lobster pot gear have been documented prior to 1990 and after 1994. The serious injury and mortality rate of right whales during the 1990-1994 period exceeded 50% of the PBR; consequently, the fishery was elevated from Category III to Category I in the 1997 List of Fisheries.

The 1994 amendments to the MMPA required that NMFS develop take reduction plans for strategic ("strategic" refers to stocks with a serious injury and mortality rate in excess of PBR and/or endangered species) marine mammal stocks interacting with Category I and II fisheries. That legislation also provided for the development of take reduction plans for non-strategic stocks in cases where a Category I fishery has a high level of serious injury and mortality of a number of marine mammal stocks.

The annual rate of serious injury and mortality of right whales due to human activities exceeds the PBR. In addition, right, humpback, and fin whales are listed as endangered under the ESA. Therefore, these three stocks are listed as strategic stocks under the MMPA. Because these stocks are strategic and known to incur serious injury and mortality incidental to the lobster pot fishery, a take reduction process was initiated to address those interactions. Although the minke whale stock is not strategic at this time, NMFS included minke whales in the large whale take reduction process. As a result of that process, NMFS has issued an Atlantic Large Whale Take Reduction Plan (ALWTRP) to address entanglement of the western North Atlantic stocks of right, humpback, and fin whales and the Canadian/East Coast stock of minke whales in four U.S. East Coast fisheries, including the American lobster pot fishery. The interim final rule

implementing the ALWTRP was published July 22, 1997; regulations in that plan affecting the lobster pot fishery became effective November 15, 1997. The final rule implementing the ALWTRP was published February 16, 1999; regulations in that plan affecting the lobster pot fishery became effective April 1 ,1999. The ALWTRP incorporates previous actions taken under MMPA emergency action for Cape Cod Bay and the Great South Channel to implement ESA requirements.

As currently written, the ALWTRP regulations have minimal impact on the overall level of effort in the lobster fishery. However, the degree of impact in certain areas may change significantly if current regulations prove insufficient to reduce entanglement risk. NMFS will amend the ALWTRP regulations as needed when gear modifications which reduce entanglement risk are developed and/or as necessary to reach take reduction plan goals. However, lobster effort reduction and related impacts to the industry from those measures cannot be quantified at this time.

The impacts of the ALWTRP regulations on the lobster pot fishery were assessed in a final Environmental Assessment (EA) issued on July 15, 1997. Lobster conservation which would result from the ALWTRP actions was not specifically addressed in the EA. Conservation of the lobster resource from whale protection measures as currently implemented would primarily occur in the right whale critical habitat area in the Great South Channel, where lobster pot gear was prohibited during the April 1 - June 30 period under the emergency MMPA regulations and the ALWTRP regulations. Under the ALWTRP, gear modifications are required year-round in Cape Cod Bay, with the most restrictive measures in place during the January 1 through May 15 period. The gear modifications are not expected to directly affect the harvest capacity of the lobster pot fishery, primarily because gear modifications include changes in rigging of the lines and buoys associated with the pots rather than changes in the pots themselves. However, some lobster conservation would occur if vessels elected not to fish during the January-May period due to disruption in fishing operations resulting from re-rigging gear to comply with the ALWTRP regulations. The EAs prepared for the MMPA emergency regulations and the ALWTRP interim final rule suggested that very little lobster pot fishing occurs during the January 1 - May 15 period in Cape Cod Bay or the April 1 - June 30 period in the Great South Channel. Therefore impact on overall lobster conservation from the current whale conservation actions is expected to be minimal.

The ALWTRP contains a contingency measure which could result in expansion or contraction of critical habitat restrictions if right whale distribution changes significantly in those areas and times. Additionally, if right whales are entangled in exempted gear in the critical habitat areas, those areas could be closed during high risk periods until more effective gear modifications are developed. It is not possible to assess such impacts at this time; however, the effects would be short in duration and limited to the critical habitat areas.

Other marine mammal protection measures may indirectly affect the lobster industry through restrictions on gear types such as sink gillnet gear which is used in some areas to catch bait for

traps. NMFS has issued additional regulations under the ALWTRP to address entanglements of whales in gillnet gear and MSA regulations to protect northern right whales and harbor porpoise. The regulations impacting the use of gillnet gear may affect the use of bait gillnets by lobster pot fishermen in some areas of the Gulf of Maine, Great South Channel, and southern New England. The ALWTRP contains no restrictions on trawl fisheries, so the mobile gear effort would not be negatively impacted by whale conservation measures.

The Commonwealth of Massachusetts also implemented restrictions on lobster pot gear in the state water portion of the Cape Cod Bay critical habitat during the January 1 - May 15 period. The final ALWTRP regulations adopt the regulations established by the Commonwealth of Massachusetts for lobster gear. NMFS believes that the Commonwealth, working directly with the affected fishermen, has developed a workable plan that has the allegiance of the fishermen to lower the risk of entanglement. Massachusetts has also implemented gillnet restrictions for the purpose of right whale and/or harbor porpoise conservation, similar to those in the ALWTRP and the Magnuson-Stevens Act.

4. Human Activities

A description of human activities associated with American lobster management is presented in Section VIII.D of the Council's FMP Amendment 5. The American lobster fixed gear fishery, as it relates to gear conflict in the Gulf of Maine, Georges Bank, and Southern New England is presented in Section 7.1.1.1.1 of the Council's FMP Amendment 6, published in July 1996. A threshold analysis of economic impacts on small businesses of possible Federal lobster management actions is presented in Section VI (Regulatory Impact Review) of this FEIS. A discussion of social/cultural and economic impacts is incorporated in Section III.

- **Description of the Lobster Fishery**

  - **Offshore Lobster Trap Fishery**

    An updated description of the American lobster industry, including an overview of the offshore lobster fishery, is presented on pages 18-22 of the Draft Large Whale Take Reduction Plan (ALWTRT 1997). There continues to be a large fleet of special purpose offshore lobster trip boats from Maine to Rhode Island that target lobster offshore. There are approximately 100 vessels fishing lobster traps offshore, mainly in the canyon areas. These boats have a crew of 4 or 5; vessels that work between inshore and offshore areas generally have a crew of 2-3 people. While inshore lobster boats may fish either single traps, pairs of traps, or "trawls" containing multiple traps, offshore lobster boats use trawls generally from 40-60 traps in length. Offshore lobster fishing is a year-round business, although some boats have concentrated on crab trapping during winter months in recent years. Some offshore boats bring their traps ashore during the winter, some concentrate their fishing on the narrow edge of the continental shelf, and some fish for

crabs in the mid-shelf region. Offshore boats generally have from 1,500 to 3,000 traps in the water, with some boats fishing 5,000 or more traps. Traps are hauled once per week or more when the lobsters are potting well, and somewhat less during the winter due to weather constraints.

- **Federal Lobster Permit Holders**

  Both 1997 and 1996 permit data are provided here. Data for 1997 are the most current, but data for 1996 are the most current that can be linked with a full year of landings data.

  As of December, 1997, 3,153 vessel owners held Federal lobster permits. Of these 3,117 held only commercial lobster permits, 16 held only recreation lobster permits, and 20 held both commercial and recreational lobster permits. The majority of these are associated with smaller vessels (see Tables V.1 and V.2), and the bulk are identified with Maine or Massachusetts as the primary port of landing, followed distantly by Rhode Island, and then New Jersey, New York and New Hampshire (see Table V.3). Of these 3,153 vessels, 1,962 also hold at least one other Federal permit (see Tables V.4 and V.5)

Table V.1 Length Data for Vessels with Commercial Federal Lobster Permits

	Avg. Length for All Vessels	**Number of Vessels in Various Length Categories**				
		0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
1997	44 feet	387	1923	275	555	13
1996	44 feet	480	2049	297	621	18

Table V.2 Tonnage Data for Vessels with Commercial Federal Lobster Permits

	Avg. Tonnage for All Vessels	**Number of Vessels in Various Tonnage Categories**			
		0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
1997	36 GRT	262	2276	435	180
1996	39 GRT	319	2455	489	201

Table V.3 Number of Vessels by Primary Port State holding Commercial Federal Lobster Permits

	CT	DE	MA	MD	ME	NC	NH	NJ	NY	PA	RI	VA	Other
1997	44	12	1050	17	1201	42	103	174	147	3	301	51	8
1996	45	12	1172	19	1342	45	112	173	154	4	327	54	4

Table V.4 Numbers of Commercial Federal Lobster Permitted Vessels holding Different Numbers of Other Federal Permits

	0 other permits	1 other permit	2 other permits	3 other permits	4 other permits	5 other permits	6 other permits
1997	1169	414	420	385	266	221	278
1996	1083	574	419	664	743	0	0

N.B. For this analysis only Multispecies, Summer Flounder, Scallops, Squid/Mackerel/Butterfish, Scup, and Black Sea Bass permits were examined, since surfclam and ocean quahog permits provide no harvest rights. Thus, the maximum number of other permits it is possible to hold is 6. Black Sea Bass and Scup permits, however were newly created in 1997.

Table V.5 Numbers of Commercial Federal Lobster Permitted Vessels holding Different Types of Other Federal Permits

	Multispecies	Summer Flounder	Squid/ Mackerel/ Butterfish	Atlantic Sea Scallops	Black Sea Bass	Scup
1997	1762	760	1157	1437	477	653
1996	2192	822	1734	1582	0	0

Breaking out mobile gear vessels versus trap vessels requires using data from 1995 and 1996. Mobile gear vessels were determined using 1996 commercial landings data. Trap vessels were determined using a 1995 review of lobster trap fishermen. These 1995 data were preferred over 1996 commercial landings data for this purpose, because the 1995 data provide numbers of traps set and these data are used in Sections III and IV (social/cultural and economic impacts) and VI (Regulatory Impact Review) of this FEIS. Once the gear type was determined, permit data from 1996 were examined for all vessels of both gear types. Permit data from 1995 were used only for those trap vessels which possessed a permit in 1995 (when the trap review was conducted) but no permit in 1996.

In 1996, at least 901 mobile gear vessels possessed American lobster permits. All had commercial category permits, and five also had recreational category permits. On average, as one would expect, the mobile gear fleet vessels are larger (Tables V.6 and V.7) than the trap vessels (Tables V.10 and V.11). The majority port states are Massachusetts, Maine, and Rhode Island (Table V.8). The numbers of lobster mobile gear vessels with other Federal permits are shown by species/FMP in Table V.9.

Table V.6 Length Data for Mobile Gear Vessels with 1996 Commercial Federal Lobster Permits

Avg. Length for All Mobile Gear Vessels	**Number of Mobile Gear Vessels in Various Length Categories**				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
58 feet	11	308	172	401	9

Table V.7 Tonnage Data for Mobile Gear Vessels with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Mobile Gear Vessels	**Number of Mobile Gear Vessels in Various Tonnage Categories**			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
73 GRT	11	437	345	108

Table V.8 Number of Mobile Gear Vessels by Primary Port State holding 1996 Commercial Federal Lobster Permits

CT	**MA**	**MD**	**ME**	**NC**	**NH**	**NJ**	**NY**	**RI**	**VA**	**Other**
10	358	3	174	23	44	66	84	117	19	3

Table V.9 Numbers of 1996 Commercial Federal Lobster Permitted Mobile Gear Vessels holding Different Types of Other Federal Permits

Multispecies	**Summer Flounder**	**Squid/ Mackerel/ Butterfish**	**Atlantic Sea Scallops**	**Black Sea Bass**	**Scup**
865	553	798	776	901	901

In 1996, 2114 trap gear vessels possessed American lobster permits. All had commercial category permits, and twelve also had recreational category permits. The vessels are small on average (Tables V.10 and V.11). The majority port states are Maine, then Massachusetts, followed distantly by Rhode Island (Table V.8). The numbers of lobster trap vessels with other Federal permits are shown by species/FMP in Table V.13. Those trap vessels which reported the number of traps averaged 300 traps per vessel. The minimum reported was 0 traps and the

maximum reported was 5500 traps.

Table V.10 Length Data for Trap Vessels with 1996 Commercial Federal Lobster Permits

Avg. Length for All Trap Vessels	Number of Trap Vessels in Various Length Categories				
	0-30 ft	31-45 ft	46-60 ft	61-100 ft	101+ ft
39 feet	316	1489	148	159	1

Table V.11 Tonnage Data for Trap Vessels with 1996 Commercial Federal Lobster Permits

Avg. Tonnage for All Trap Vessels	Number of Trap Vessels in Various Tonnage Categories			
	0-4 GRT	5-50 GRT	51-150 GRT	151-500 GRT
25 GRT	207	1729	138	38

Table V.12 Number of Trap Vessels by Primary Port State holding 1996 Commercial Federal Lobster Permits

CT	DE	MA	MD	ME	NC	NH	NJ	NY	RI	VA	Other
26	8	729	16	872	3	65	97	75	212	10	1

Table V.13 Numbers of 1996 Commercial Federal Lobster Permitted Trap Vessels holding Different Types of Other Federal Permits

Multispecies	Summer Flounder	Squid/ Mackerel/ Butterfish	Atlantic Sea Scallops	Black Sea Bass	Scup
1273	242	873	759	0	0

ºº Social/Cultural and Economic Factors

The social/cultural and economic analyses contained in Amendment 5 to the American lobster FMP remain relevant. The offshore EEZ fishery has been further described by the ALWTRT (1997):

> In the 1970's and 1980's, many offshore trap vessels left their traps unattended for a month or two during the winter. There were several reasons for this; the boats tended to be smaller than they currently are, the offshore fishery was formerly more productive than it currently is during the summer months, and there was no real market for crabs, which is now the alternative fishing opportunity during the winter

months. The practice of storing traps in certain safe areas for a period of time in the winter has diminished as the fishery has become more competitive and the crab market has provided an additional opportunity for vessel owners to continue to make use of their gear through the winter months. The offshore lobster trap fishing effort has increased slowly but steadily over the years.

Also, the nature of the fishery has been further described by McCay et. al. (1993) and Finlayson and McCay (1994). In the past 5 years, some participants in the offshore lobster fishery have diversified into black sea bass pots. Much is specialized targeting, and not bycatch in a directed lobster fishery (black sea bass, in general, is a minor bycatch from offshore and inshore lobster fishing and amounts to about 0.5% of landed value). Additional bycatch (species and/or) fisheries include Jonah crab, (about 2.5% of landed value) red crab, conger eel, conch and hagfish. From New Jersey to Virginia, the black sea bass fishery is dominated by a few large-scale, full time black sea bass/lobster specialists fishing 1,000-2,000 black sea bass pots and a similarly large number of lobster pots. This sector often alternates days fishing between black sea bass pots and lobster pots. A black sea bass pot fishery located in Nantucket Sound is managed by the State of Massachusetts.

In 1996, the fishery for American lobster in Northeast coastal states retained its first place in ex-vessel revenues. The 1996 harvest of $242.2 million of lobster was a 13% increase over 1995. Maine accounted for 44% of the lobster harvest, Massachusetts for 27%, and New York for 14%. Major lobster ports include Point Judith and Newport, Rhode Island; Westport, New Bedford, Sandwich, Hyannis, and Gloucester, Massachusetts; and Newington, New Hampshire.

°° **Trap vs. Nontrap Lobster Harvest**

Data compiled by NMFS indicates that trap/pot gear during the years 1994-1996 comprised 95 percent, 93 percent, and 98 percent of total annual lobster landings, respectively. Similarly, annual harvest of lobster by methods other than pots or traps was 1.8 percent, 3.0 percent, and 1.7 percent of total annual landings during those years. The majority of nontrap harvest is taken by otter

trawl; other methods include beam trawl, Danish seine, scallop dredge, floating trap, diving gear, longline, hand line, pound net, and gill net.

- **Recommendations for Further Research**

In addition to the research recommendations presented in Section VIII.D.5 of the NEFMC's FMP Amendment 5, the Commission identified additional American lobster research priorities in January 1997. These include, but are not limited to,:

- Stock identification studies, particularly as related to inshore/offshore components south of Georges Bank;
- Evaluation of information on lobster molting frequency and lobster growth, mortality, and recruitment among years and geographical areas;
- Enhanced sea sampling and/or port sampling of offshore catches for biological information; and
- A study of lobster v-notching practices undertaken by area fishermen to reduce uncertainty in estimation of biological reference points.

A complete listing of these research topics is presented in Special Report No. 62, "Prioritized Research Needs in Support of Interjurisdictional Fisheries Management", available from ASMFC, 1444 Eye Street, N.W., Sixth Floor, Washington, D.C. 20005.

VI. RELATIONSHIP TO APPLICABLE OTHER LAW

1. REGULATORY FLEXIBILITY ACT (RFA)

Regulatory Flexibility Analysis

In preparation for the final rulemaking decision, the following regulatory analysis is provided.

Introduction

The purpose of the Regulatory Flexibility Act (RFA) is to minimize the adverse impacts from burdensome regulations and record keeping requirements on small business, small organizations, and small government entities. This section discusses the impacts specifically on the effects of the resource management action on small business entities.

NMFS standards for a finding of a significant economic impact on small businesses for RFA purposes are as follows: 5 percent loss of revenue for 20 percent of the participants; 10 percent increase in compliance costs for 20 percent of the participants; and 2 percent of the participants go out of business. A finding of significant impact would be appropriate if any one of these three thresholds are surpassed. The Small Business Administration defines a small business in the commercial fishing industry as a firm with gross revenues of up to $3.0 million. By this definition all vessels engaged in the Northeast American lobster fishery are considered to be small businesses.

Problem Statement

The need for action is described, see Section II of this FEIS.

Objectives

The objectives for Federal regulatory action for lobsters in Federal waters is discussed in Section II.2.

A Description of Reporting Requirements

A description of the reporting requirements and affected entities are described in Section VI.4 of this FEIS.

Identification of Relevant Rules that May Be Redundant.

This FEIS will not duplicate or make redundant any current rules.

A Description of Management Alternatives.

The preferred action is described in Section III. A description of the alternatives to the preferred action is provided in Section IV.

NMFS Threshold

The description of the affected entities and an estimate of the number of affected firms is discussed below in the threshold analysis. The lobster fishery is prosecuted using mobile (trawl gear) and fixed gear (traps). Since management alternatives differ between these two gear groups, the threshold analysis was performed separately for each gear group. Separate analyses are also justified because the trap sector targets lobster predominantly while the trawl sector is capable of limited targeting of lobster but usually takes lobster as a component or incidental catch of a mixed species fishery. Due to these targeting differences, management action could have quite different economic impacts.

A Determination of Economic Impact on Small Entities - Mobile Gear

The preferred mobile gear management regulations would not have a significant economic impact on the sector's participants due to the fact that the majority of these permit holders do not rely on lobster as their principal source of income. The methods used to estimate the impacts on mobile gear participants are described below.

Threshold Analysis for Mobile Gear

The preferred mobile gear management regulations would impose a possession limit of 100 lobsters per day up to a maximum of 500 lobsters per trip for vessels using mobile gear to harvest lobsters. The impact of this limit was evaluated by examining Northeast dealer data for the 1996 calendar year for all vessels using bottom trawl gear that also held a Federal commercial lobster permit. Dealer data does not report landings on a count basis nor does it record fishing time. To overcome these deficiencies, two assumptions were required. First, it was assumed that the average weight of a trawl-caught lobster is one pound. A one pound lobster is approximately the weight of a lobster at its minimum legal size. Second, all landings were associated with one 24-hour period. These two assumptions are equivalent to a 100 pound possession limit for mobile gear fishing participants.

The trawl sector is known to land larger lobsters, on average, and would tend to retain only the largest lobsters when faced with a count limit. Also, trip duration for mobile gear vessels typically exceeds 24 hours in duration. Thus, the net effect of these two assumptions is to maximize the potential economic impact of the possible management action relative to the 1996 base, hence maximizing the likelihood that NMFS thresholds would be exceeded.

During the 1996 calendar year, 1,228 vessels using trawl gear showed landings of at least one pound of some species. Of these vessels, 901 held a Federal commercial lobster permit. The revenue impacts on these vessels were estimated by comparing their actual 1996 gross revenues to revenues as constrained by the 500 pound/count possession limit. Based on this analysis and the threshold of a 5% reduction in gross revenues, 48 (5.3%) trawl vessels would be impacted by more than a 5% reduction in revenues. By contrast, 76% of all trawl vessels included in the analysis would not be impacted at all because their documented landings did not exceed the possession limit on any trips taken during the 1996 calendar year. Based on these findings, the threshold of a 5% reduction in gross revenues for more than 20% of participants is not exceeded.

Vessel Reporting Requirements

Requirements relating to mandatory reporting for Federal permit holders will be addressed by NMFS and state fishery management agencies during the development of the Commission's ACCSP in a manner to avoid unnecessary duplication between state and Federal reporting requirements. Since the vast majority of trawl vessels holding Federal lobster permits are already subject to mandatory reporting, the action would not affect compliance costs for this gear group.

Thus, when vessel reporting requirements are implemented, compliance costs will not increase and the threshold of a 10% increase in compliance costs for more than 20% of participants is not exceeded. Further, given the finding that gross revenues for 76% of all mobile gear participants will not be reduced at all, that only 5.3% of vessels will have their revenues reduced by more than 5%, and the finding that compliance costs will not increase, the third threshold of 2% of participants ceasing operations is very unlikely to be exceeded.

The preceding discussion indicates that none of NMFS' threshold standards are exceeded for a finding of a significant action for purposes of the RFA. Thus, the possible action may be certified to have no significant impact on the mobile gear sector of the American lobster fishery in the Northeast.

A Determination of Economic Impact on Small Entities - Trap Gear

The preferred regulations would likely have a significant impact on small entities operating in both the off-shore (Area 3) and near-shore EEZ lobster fishery. The procedures used to make this determination are discussed below.

Threshold Analysis for Trap Gear

The preferred regulations will affect harvesters fishing with trap and nontrap gear in Federal waters. Since all lobster fishers are considered to be small entities under RFA, the economic effects caused by the preferred regulations apply to all fishers subject to the regulations. Similarly, all measures that minimize adverse impacts necessarily have a beneficial economic impact on these small entities. The following provides a description of the preferred regulation, an estimate of the number of entities to which the regulation will apply, and a qualitative assessment of the manner and magnitude of economic impact for each affected sector. Transfer of management authority under ACFCMA will not affect current regulations (eg. minimum sizes, prohibitions on possession V-notched lobsters, possession of egg bearing lobsters, and prohibition on interstate commerce of live lobsters below the minimum Federal size) that will be continued through the proposed action. Measures that continue existing regulations do not create any new compliance burdens nor are there any anticipated synergistic impacts between existing and proposed regulations that will affect compliance costs for small entities. The continuation of existing regulations would minimize economic impacts on small entities compared to the measures identified in the proposed rule. However, on September 30, 1997, NMFS identified American lobster as overfished pursuant to the MSA, meaning that NMFS has until June 1999 to develop a plan to end overfishing and rebuild the stock. Continuation of current regulations is not considered a viable alternative to meet the statutory objective to end overfishing and rebuild the lobster resource. Therefore, measures that merely continue existing regulations are not discussed.

Number of Regulated Entities: The following measures will apply to all Federal lobster permit holders that fish with traps: 1) trap caps, 2) maximum trap size, 3) trap tags, 4) increased escape vent, and 5) fishing area designation. Additionally, the maximum carapace size would apply to all

Federal lobster permit holders who elect to fish in Area 1. Table VI.1 lists the total number of Federal lobster permits issued in 1997 by gear and state of primary port. Note that since there is no mandatory data collection program for lobster, the gear designations had to be based on permit application data. Based on these data, there are a total of 2,785 Federal permit holders that will have to comply with both the trap regulations and the maximum size listed above. An additional 802 non-trap vessels will have to comply with the maximum size regulation. Lobster permits are not issued by gear so that vessels are free to change gear at any time. Thus, the total number of entities that will have to comply with the trap regulations could change as vessels switch gears.

Economic Effects of Regulations: The potential economic impacts of each of the management measures that will apply to entities engaged in harvesting of American lobster can only be partially quantified. Revenues by Federal permit holders are available through dealer reporting requirements but without mandatory reporting, no data is available to determine numbers of traps fished, productivity, or costs. For this reason, a qualitative assessment of economic effects is developed. This qualitative assessment is supplemented, wherever possible, with as much quantitative data as is available. Based on dealer reports, the total value of American lobster landed by Federal permit holders in 1997 was $23.97 million. This value represented 10.7 percent of the total value of American lobster ($223.7 million) landed in the Northeast region in 1997. Note that landings by Federal permit holders can come (and likely are) from a mixture of state waters, nearshore EEZ and offshore EEZ areas. Revenues by Federal permit holders were divided among trap and trawl vessels (as defined above), with trap vessels accounting for 90% of the revenues ($21.5 million). Of the trawl vessels, a total of 784 distinct vessels indicated having landed one or more pounds of lobsters during 1997 while a total of 2,731 trap vessels landed at least one or more pounds of American lobster in 1997. Thus, nearly every vessel holding a valid Federal permit in 1997 participated in the lobster fishery to some degree. Among trap vessels in excess of 50 feet in overall length, American lobster landings were valued at $13.95 million in 1997.

Trap Caps Federal permit holders will be subject to a limit on the maximum numbers of traps that can be fished. The trap caps for Federal permit holders fishing in nearshore zones will be 1,000 traps in 1999 and 800 traps in the year 2000. For the offshore zone (Area 3), the proposed trap caps are 2,000 and 1,800 in the years 1999 and 2000, respectively. Although not always the case, it is generally recognized that vessels in excess of 50 feet are required to prosecute the offshore fishery. Based on this distinction, there were 297 trap vessels that may be involved in the offshore fishery and 2,488 vessels that may fish predominantly in the nearshore zones (see Table VI.2 for a summary of nearshore and offshore vessels by state of primary port). The last year for which data was voluntarily requested on traps fished by Federal permit holders was 1992. In the subsequent years 1993-1995, trap data was carried forward from 1992 and updated for new entrants to the lobster fishery or existing Federal permit holders who continued to provide adjustments to their 1992 trap data. The year 1995 was selected as the baseline for the threshold analysis. Based on the most recent data, 37.7% of nearshore and 49.6% of offshore vessels provided trap data. The average numbers of traps fished by these reporting vessels was 667 and 1,321 by nearshore and offshore vessels, respectively. Of these reporting vessels (703), 26.0% (183) of the nearshore and

27.4% (34) of the offshore vessels (124) fished more than 800 and 1800 traps, respectively, in 1995. Thus, among all reporting vessels a total of 30.9% fished more traps in 1995 than the proposed trap caps would allow. Since 1995 expansion in numbers of traps has likely continued. This means that estimates of numbers of entities that are currently above the proposed trap caps based on 1995 data are likely to be underestimated. The relative amount of underestimation is not known at this time. Available data indicate that the average number of traps fished by Federal permit holders that fish in the nearshore zones is less than 667 traps. Similarly, the average number of traps fished by offshore vessels is 1,321 traps. In both cases, the proposed trap caps are above these averages leaving room for increases in traps fished by vessels that are currently under the cap even as vessels over the cap are reducing.

The economic implications for these reducing entities and for those entities that are currently below the trap cap depend upon several factors. The relationship between traps and catch is generally recognized as being nonlinear and multidimensional. Within certain limits, adjustments to days fished, trap hauls, crew, soak times, and trap configurations may be adopted to mitigate the loss in traps and even increase productivity. The economic impacts of trap reductions will depend upon the relative magnitude of the reduction and whether or not competing entities increase the number of traps they fish. Reducing the number of traps fished is equivalent to giving up territory. Firms that will be faced with relatively small reductions will not be forced to give up fishing area. Firms that will be faced with moderate to large reductions will be giving up more territory. If competing firms do not seek to take over the lost area, the reducing firm may be able to maintain profitability by making the adaptations described previously. As long as competing entities do not increase their trap numbers additional positive benefits could accrue including cost savings due to the need to maintain and replace fewer traps. These cost savings would accrue to individual vessels. Additional cost savings could accrue to the lobster industry as a whole as the economic costs associated with crowding externalities would be reduced. Reduced crowding would also effect cost savings in other fisheries as well as the incidence rate of gear conflicts are reduced. However, if firms do take over lost territory either by shifting existing traps or by increasing traps then these competing firms will be able to increase their own profitability at the expense of the reducing firms. At current levels, trap numbers may be assumed to be spatially distributed in a manner from greatest to least productive territory until the yield from the last trap fished is zero. If existing conditions were to continue, the opportunity for existing entities to expand will be limited by available productive area. However, as traps are removed, due to the trap cap, productive territory will be made available to other entities. These entities may either 1) do nothing, 2) change their current distribution of traps without increasing the numbers of traps fished, or 3) increase the number of traps fished (within the constraints of the trap cap) to maintain current territory and to take over new territory. Which of the three options any given entity might choose, cannot be predicted before the fact, but if firms do take over lost territory either by shifting existing traps or by increasing traps then these competing firms will be able to increase profitability at the expense of the reducing firms.

Maximum Trap Sizes The preferred regulation would impose a limit on trap size in terms of volume. The maximum size differs between offshore and nearshore fishing zones and will affect

all Federal permit holders that use trap gear. The maximum trap size is intended as a capping mechanism to prevent increased trapping efficiency by limiting expansion of trap sizes. No data is currently available to document the numbers of traps that are currently above the size cap in either nearshore or offshore areas. However, the size caps were determined through a series of Commission meetings with industry representatives and were set at or above known industry standards at the time. For this reason, the maximum trap size has been set to accommodate the majority of gear currently in use. For the worst case scenario, the average nearshore vessels fishing 667 traps would have to replace every trap at a cost of $50 per trap for a total cost of $33,350. Similarly, the cost burden for an average offshore vessel would be $65,050 (1,321 traps at $50/trap).

Escape Vent Size Increase The preferred regulation will require installation of an escape vent that is 1/16th of an inch greater than what regulations currently require. This regulation will apply to all traps fished by Federal lobster permit holders. Evidence offered by Effort Management Team (EMT's) members during the development of Amendment #5 to the American lobster FMP indicates that at least some portion of the lobster industry is already using escape vents larger than current regulations require and would be in compliance with the preferred regulation. The estimated cost of materials for a replacement escape vent is $0.259. Assuming that it would take approximately 5 minutes to remove the old escape vent and affix the replacement panel at a cost of $13.72/hr (average manufacturing wage rate in the New England MSA, Bureau of Labor Statistics), the labor cost associated with replacing an escape vent would be $1.14. No data is currently available to document the actual number of escape panels that would have to be replaced. However, assuming a worst case scenario, replacement of escape vents would cost an average nearshore vessel fishing 667 traps a total of $933 (667 times $1.399 labor plus materials). The cost to an average offshore vessel fishing 1,321 traps would incur a cost of $1,848. These costs represent a one-time only increase in compliance costs since the new escape vents would be incorporated into traps through normal replacement and maintenance. Vessels that are currently using conforming escape vents would not have to bear these costs. The added costs of replacing escape vents may be partially offset with cost savings as the time required to cull the catch would be reduced (the principal reason why many industry participants already are using escape vents larger than the current legal requirement).

Trap Tags The preferred regulation will require that all traps fished by Federal lobster permit holders be affixed with a tag. These tags will have to be purchased at a cost of approximately $0.14 each. Assuming that it would take approximately 1 minute to remove old tags and replace them with new ones, and a cost of $13.72/hr (average manufacturing wage rate in the New England MSA, Bureau of Labor Statistics), the labor cost associated with replacing trap tags would be $0.23 each. For an average nearshore zone vessel fishing 667 traps, the preferred regulation would require an annual increase in compliance costs of $247. For an average offshore vessel fishing 1,321 traps, the annual increase in compliance costs would be $515.

Maximum Carapace Size in Area 1 The preferred regulation will prohibit the taking of lobsters in excess of the maximum size by anyone fishing with either trap or trawl gear in Area 1. The

prohibition will also apply to any trap vessel that selects Area 1 no matter where it fishes. Entities that currently fish in Area 1 will not be able to sell lobsters above the maximum carapace length and will lose a portion of their revenues. Landings data by carapace length are not available to provide a quantitative estimate of these lost revenues. However, estimates of the size structure of female lobsters landed in the Gulf of Maine produced for the 16th SAW indicate lobsters in excess of 128 mm (approximately 5") comprised 0.06% of 1992 landings. Given this finding, the proportion of total revenues to Area 1 vessels comprised to lobsters in excess of the maximum size is not likely to be very high. Further, the analysis conducted for mobile gear in the IRFA for the DEIS indicated that even though nearly every Federal lobster permit holder landed at least some quantity of lobsters, the number of trawl vessels that relied on lobster was not a substantial proportion of total trawl vessel participants in the American lobster fishery.

Summary of Impacts

NMFS has established several criteria to be used to determine if an action has a significant impact on a substantial number of small entities:

A. Does the action result in revenue loss of more than 5 percent for 20 percent or more of the participants?

The two measures that could directly affect revenues are the trap caps and the maximum carapace in Area 1. The preceding analysis indicated that approximately 30% of small entities will have to reduce the numbers of traps fished. However, as pointed out, within certain limits, adjustments to days fished, trap hauls, crew, soak times, and trap configurations may be adopted to at least partially offset the loss in traps. These adaptive strategies, together with an anticipated reduction in fishing mortality rates, will likely result in an eventual increase in catch per unit effort (ie. catch per trap hauled). However, given the difference in timing between the trap reductions and the anticipated longer term increases in catch, it seems likely that a substantial number of individual entities will experience reductions in total revenues that exceed 5% for at least some portion of the stock rebuilding schedule. Even if vessels find ways of maintaining gross revenues, it will likely require substantial changes in the way in which they organize their business. Further, for at least some portion of small entities operating in Area 1, additional revenues will be lost from the sale of lobsters in excess of the proposed maximum carapace length. Therefore, it appears likely that a substantial number of vessels will experience a reduction in revenues in excess of the 5% threshold, and that trap reductions will likely require significant changes in business operations for a substantial number of entities.

B. Does the action cause annual compliance costs (reporting, operating, capital) to increase by more than 5 percent for 20 percent or more of the participants?

The maximum trap size, trap tags, and increased escape vents all will require some amount of cash outlay to come into compliance with the preferred action. Under a worst case

scenario, for an average vessel, the cumulative cost of replacing escape vents and purchasing trap tags was estimated to be $1,180 and $2,363 for nearshore and offshore vessels, respectively. Surveys of offshore and nearshore lobster vessels by the University of Rhode Island indicate that average annual operating costs for offshore vessels were approximately $190,000 per year, exclusive of crew payments. Similarly, the estimated average operating costs for nearshore vessels were $24,000. As a proportion of operating costs, the estimated compliance costs (1.2%) for offshore vessels does not exceed NMFS threshold. The proportional increase (4.9%) in compliance costs for replacement of escape panels and trap tags by nearshore vessels does not approach the NMFS threshold for significance. Replacement of nonconforming traps would represent a significantly larger increase in compliance costs, since new traps were estimated to cost $50 each. It is likely that at least some portion of small entities will bear compliance costs that will exceed the NMFS threshold of a 5% or greater increase in compliance costs. However, given available data, it is not possible to determine with reasonable certainty whether a substantial number (20% or more) of entities will be significantly impacted.

C. Does the action result in 2 percent of the participating entities ceasing business operation?

The 2 percent threshold would be exceeded if the cumulative impacts of revenue reductions and costs increases cause 56 of the 2,785 Federally permitted lobster trap vessels to cease business operations. Vessels that are currently fishing large strings of gear will likely suffer greatest short run revenue losses. If these same vessels are also using traps in excess of the proposed maximum, then the combined impacts of revenue losses and gear replacement cost could put these vessels out of business. Unfortunately, while the possibility exist for these circumstances to occur, it is not possible to determine how many vessels will actually be affected.

Table VI.1. Total Number of Federal Lobster Permit Holders by Gear and State (1997)

State	Trap Gear	Non-Trap Gear
Maine	1293	73
New Hampshire	79	41
Massachusetts	864	356
Rhode Island	258	79
Connecticut	29	19
New York	88	76
New Jersey	121	61
Delaware	12	0

Maryland	14	3
Virginia	14	44
North Carolina	7	38
Other	6	12

Table VI.2. Total Number of Federal Lobster Permit Holders by Offshore/Nearshore and State (1997)

State	Nearshore	Offshore
Maine	1261	32
New Hampshire	68	11
Massachusetts	747	117
Rhode Island	203	55
Connecticut	23	6
New York	63	25
New Jersey	90	31
Delaware	11	C
Maryland	8	6
Virginia	6	8
North Carolina	3	4
Other	5	C

C Denotes fewer than 3.

2. REGULATORY IMPACT REVIEW

The Regulatory Impact Review (RIR) is part of the process of preparing and reviewing fishery management actions and provides a comprehensive review of the changes in net economic

benefits to society associated with proposed regulatory actions. The RIR is designed to provide information to determine whether the proposed regulation is likely to be "economically significant", i.e. have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. The analysis also provides a review of the problems and policy objectives promoting the regulatory proposal and an evaluation of the major alternative that could be used to solve the problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective way.

Executive Order 12866

Executive Order (E.O.) 12866, "Regulatory Planning and Review", was signed on September 30, 1993, and established guidelines for promulgating new regulations and reviewing existing regulations. While the executive order covers a variety of regulatory policy considerations, the benefits and costs of regulatory actions are a prominent concern. The regulatory philosophy stresses that, in deciding whether and how to regulate, agencies should assess all costs and benefits of all regulatory alternatives. In choosing among regulatory approaches, the philosophy is to choose those approaches that maximize net benefits to society.

The regulatory principles in E.O. 12866 emphasize careful identification of the problem to be addressed. The agency is to identify and assess alternatives to direct regulation, including economic incentives, such as user fees or marketable permits, to encourage the desired behavior. When an agency determines that a regulation is the best available method of achieving the regulatory objective, it shall design its regulations in the most cost-effective manner to achieve the regulatory objective. Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of , the intended regulation.

E.O. 12866 requires that the Office of Management and Budget review potential regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this

Executive Order.

Determination of "Economically Significant"

The analysis provided shows that if the evaluated management measures were enacted, this regulatory action would not constitute a "major rule" under the criteria described in E.O. 12866.

A regulatory program is "economically significant" if it is likely to result in an annual effect on the economy of $100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. This action should not have an annual effect of $100 million or more. The exvessel value of American lobster landings in 1996 harvested from EEZ waters amounted to $50.7 million. The ex-vessel value of lobster harvested from the EEZ has fluctuated between $25.9 million and $50.7 million over the past 6 years. Landings of American lobster from the EEZ have averaged 10.1 million pounds valued at $36.2 million over the past six years from 1991-1996.

Other E.O. 12866 Requirements

This action will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

This action will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof. This action is not expected to lead to an increase in costs or prices to consumers, nor will this action have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign based enterprises in domestic or export markets.

This action will not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

Benefits and Costs

NMFS guidelines for conducting analyses commensurate with the requirements of E.O. 12866 include consideration of the gross benefits and economic costs of the selected alternative. Additionally, the relative costs and benefits of alternative regulatory approaches and any risks or uncertainties associated with the economic assessments should be discussed. Following this guidance, the economic benefits of the management action are described in the first section. The identifiable economic costs are discussed in the next section. Following the discussion of economic costs, uncertainties that may affect the realization of estimated benefits and costs are identified and discussed. The last section compares the selected alternative to alternatives that were considered in the Public hearing process but were not selected.

Economic Benefits:

Economic analysis has consistently demonstrated positive returns to management of the American lobster resource under a wide variety of circumstances. Acheson and Reidman (1982) found that increases in the minimum size yielded a 13% internal rate of return on investment. By comparison, Richardson and Gates (1986) found that an increase in minimum size with no restriction on new entry would yield longer run positive consumer gains but resulted in only slight improvement in producer's surplus. However, the authors found substantial consumer and producer gains could be realized with a combination of limited entry and a 20% reduction in the fishing morality rate. Note that the reduction in traps required to achieve the 20% reduction in fishing mortality was 42% and 37% for inshore and offshore fisheries, respectively. Even with no changes in fishing mortality rate, Cheng and Townsend (1993) found that management strategies that could effect a change in the seasonal pattern of landings could yield increased gross revenues of 18%. Economic analysis of the preferred alternative conducted by the Lobster Fishery Plan Development Team (1994) for Amendment 5 of the American lobster FMP indicated a slight decline (1%) in combined consumer and producer surplus as compared to the status quo or no action alternative. However, the PDT report noted that a more rigorous rebuilding period would likely have resulted in economic benefits favoring the preferred alternative over the status quo that existed at the time.
Although the specifics of the final rule differ from that of the alternatives taken out to public hearings, the conservation objectives remain the same. Therefore, the analysis of gross revenue changes developed for the DEIS remains valid. The biological and economic analysis is presented below.

Projection of Biological Yield

The yield and egg-per-recruit model use here was originally developed by Fogarty and Idoine and has subsequently been modified by Idoine and Rago to incorporate additional biological realism, and evaluation of more complicated management options. In the context of lobster assessment, the model has been used to evaluate the efficacy of proposed fishery management measures such as changes in the minimum size limit. Under a given set of regulatory measures, the model can be used to estimate the percent of maximum lifetime yield per recruit (YPR) and egg production per recruit (EPR) that would occur under varying levels of realized fishing mortality (F_{real}). In general terms, the relationships between EPR, YPR and realized F are expressed as:

$$YPR = Y/EPR(F_{real} \mid \underline{\theta}) \text{ and } EPR = Y/EPR(F_{real} \mid \underline{\theta})$$

where $\underline{\theta}$ represents a set of parameters for growth, reproduction and natural mortality and $Y/EPR(.)$ represents the yield and egg-per- recruit model. A summary of the relationship between EPR, YPR and realized F is provided in Table VI.3.

Another output of the YPR/EPR model is the relationship between nominal and realized fishing mortality. The capture process is modeled with the classic catch equation but the magnitude of

the actual mortality realized is modified by various regulations. For example, prohibitions on the landings of berried females and v-notched lobsters diminish the effectiveness of nominal input levels of fishing mortality. Thus, realized levels of fishing mortality are always less than nominal levels. If nominal fishing mortality is proportional to the magnitude of fishing effort, then the relationship between nominal F and realized F may be considered as proxy measure of the relationship between effort and fishing mortality. As demonstrated in SARC 22, the relationship is nonlinear (Table VI.4, Figure VI.1).

The key assumption in this analysis is that reductions in trap limits or their conservation equivalent for fishermen are proportional to reductions in nominal fishing mortality rates. As trap limits are reduced, actual fishing effort will ultimately be constrained by the number of traps available. However, present databases are insufficient to estimate the precise implications of the preferred trap caps. To the extent that harvesters can modify fishing practices in response to fewer traps, the assumptions used in our analyses probably overestimate the expected reductions in fishing mortality and improvements in yield and eggs per recruit.

The expected changes in yield and eggs-per-recruit were estimated in two stages. First, the proposed reduction in nominal fishing mortality rate (i.e., percent reduction in traps) was converted to expected reduction in realized F by using an empirical calibration curve. A fifth order polynomial was used to fit the relationship between realized and nominal fishing mortality rates as shown below:

$$F_{realized} = {}_0 + {}_1 F_{nominal}^{1} + {}_2 F_{nominal}^{2} + {}_3 F_{nominal}^{3} + {}_4 F_{nominal}^{4} + {}_5 F_{nominal}^{5} \qquad \textbf{(1)}$$

Results of the model fit for Gulf of Maine, Georges Bank and South, and South of Cape Cod and Long Island Sound are shown in Table VI.5.

The second stage of the analyses requires an interpolated estimate of the change in YPR and EPR as a function of the estimate of realized fishing mortality rates. Interpolation of YPR was accomplished with a fourth order polynomial as shown below:

$$YPR = {}_0 + {}_1 F_{realized}^{1} + {}_2 F_{realized}^{2} + {}_3 F_{realized}^{3} + {}_4 F_{realized}^{4} \qquad \textbf{(2)}$$

For eggs per recruit it was necessary to use a fifth order inverse polynomial to fit the observed set of model outputs for realized F and EPR as shown below:

$$EPR = {}_0 + {}_1 F_{realized}^{-1} + {}_2 F_{realized}^{-2} + {}_3 F_{realized}^{-3} + {}_4 F_{realized}^{-4} + {}_5 F_{realized}^{-5} \qquad \textbf{(3)}$$

Estimates of realized fishing mortality rates by stock area were taken from SARC 22. The initial values of nominal fishing mortality rates were derived by solving equation 1 for the specified realized fishing mortality rates.

The expected yield that might occur under reduced fishing mortality were estimated by raising observed landings by the proportional increases in YPR from the status quo. Since the contemporary fishery is dominated by new recruits in all areas, this assumption is justified for small changes in realized F.

Results and Discussion

Results of these polynomial fits for each assessment area are shown in Table VI.5. Using these relationships, we can then estimate the effect on yield and egg production based on information on a "status quo" level of the resource. The status chosen was that of the last full assessment (1993-94) as reported in SARC22. Nominal rates of F were selected relative to the calculated $\mathbf{F_{realized}}$ (October 1993 - September 1994) using model 1 above. Assuming the one-to-one relationship in the percentage reduction in number of traps and $\mathbf{F_{nominal}}$, YPR and EPR values were calculated from models 2 and 3 above. Two cases were selected to compare to the baseline or status quo levels. The first uses the assumption that a 40% reduction in traps or their conservation equivalent would occur throughout the range (including state waters). The resultant changes, by area, are shown in Table VI.6. To aggregate the effects, the proportions of landings from each assessment area, and by inshore/offshore (state/EEZ) waters, shown in Table VI.7, were used to prorate the projected change in landings following the 40% reduction. This is referred to as the "Best Case" in Table VI.7.

A second view, "Worse Case", looked at the effect of a reduction scheme would have should there be no comparable scaling back in state waters. This analysis applied the increase in YPR from a 40% reduction in $\mathbf{F_{nominal}}$ only to those landings that occurred in the EEZ. State water landings were considered to stay the same. Again, the overall effect on change in landings was the sum of these prorated components, and is shown in Table VI.7. Should the latter reduction occur (i.e., limited to the EEZ), it is very likely that gains in the health of the resource in the EEZ would be compromised by the continued high exploitation inshore. Since lobsters do move around, some portion of the "healthier" EEZ portion of the population would be harvested inshore, thus decreasing the benefits of effort reduction in the EEZ.

It can be seen that the "Best Case" results show an increase in YPR of about 4.2%, 10.4% and 0.5% in the Gulf of Maine (GOM), Georges Bank (GB) and Inshore Southern New England (SCCLIS) regions, respectively. Pooling these together, and weighting by proportional landings during the years 1992 to 1994 results in an resource-wide increase of about 4.6%. Increases in EPR (97% [GOM], 80% [GB] and 71% [SCCLIS]), as shown in Table VI.6, represent a significant step toward easing the overfished condition of the resource.

The “Worse Case” results show the concern of applying an effort reduction program restricted to the EEZ. In this case, due to the overwhelming inshore component of total landings, the overall increase in yield is on the order of less than half a percent (0.3%). Other than in the GB region, there is little increase in egg production (the porportion of the resource in the other two areas that is affected by the preferred EEZ regulations is less than 1% of their total) and, therefore, this option would provide little reduction in the overfishing.

Figure VI.1. Interpolated relationship between nominal fishing mortality (Fnom) and realized fishing mortality (Freal) for three lobster stock assessment areas. Model fits are based on a fifth order polynomial, data points derived from individual runs of the SARC22 version of the yield and egg-per recruit model.

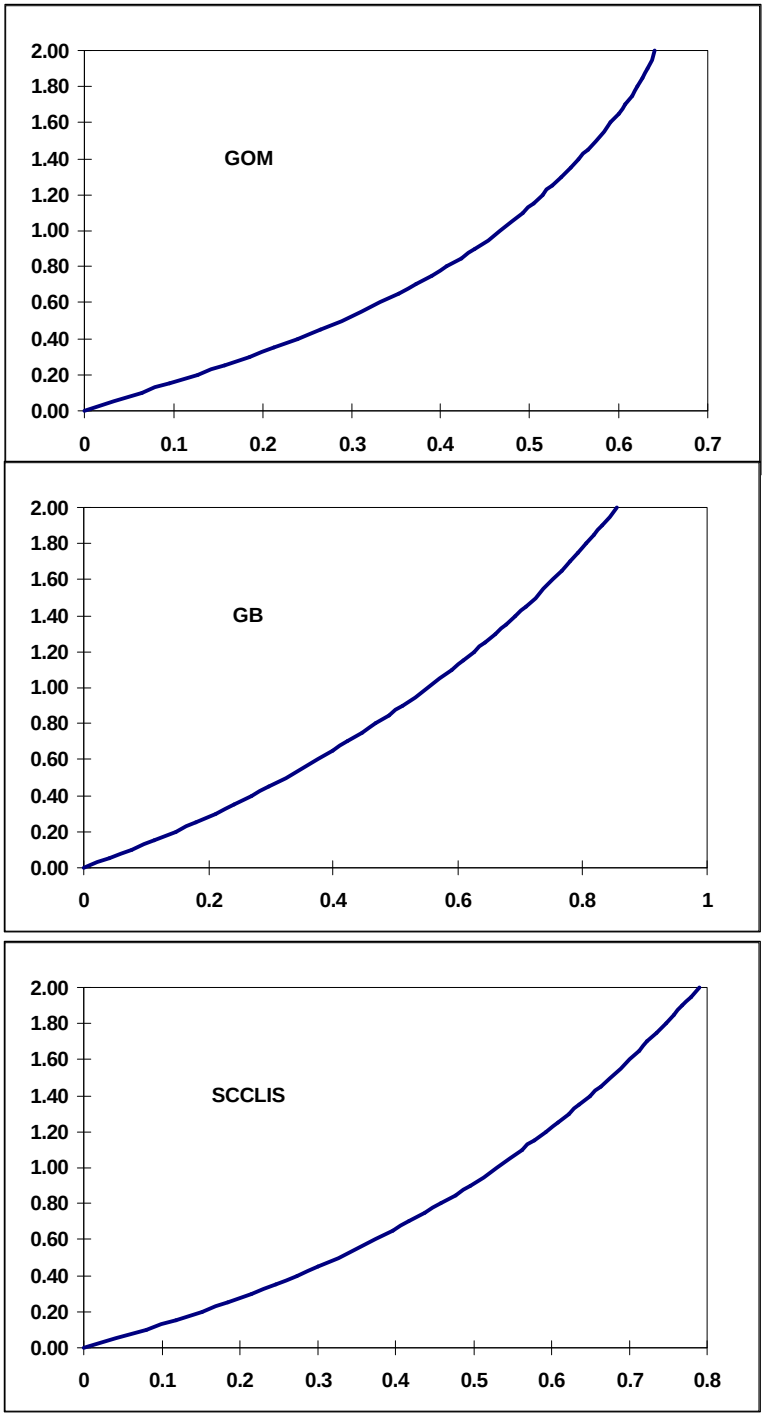


Table VI.3. Relationship between eggs per recruit and yield per recruit versus realized fishing mortality rates for lobster assessment areas. Data taken from results of SARC 22.

Gulf of Maine			Georges Bank			South of Cape Cod and Long Island Sound		
Realized Fishing Mortality Rate	Eggs per Recruit	Yield per Recruit (g)	Realized Fishing Mortality Rate	Eggs per Recruit	Yield per Recruit (g)	Realized Fishing Mortality Rate	Eggs per Recruit	Yield per Recruit (g)
0	41734.7	0.0	0	48429.7	0.0	0	33959.4	0.0
0.063	21611.2	421.0	0.078	21101.0	726.7	0.081	13460.9	368.5
0.126	13049.4	550.8	0.148	13141.9	787.4	0.152	8745.0	428.9
0.186	8790.0	590.6	0.211	9306.9	772.7	0.216	6646.6	446.0
0.24	6399.4	599.2	0.27	7027.0	745.8	0.274	5425.1	451.2
0.289	4927.9	596.6	0.324	5519.7	719.0	0.326	4610.7	452.0
0.332	3955.1	590.2	0.375	4458.9	695.1	0.374	4023.9	451.0
0.371	3275.1	582.8	0.423	3680.1	674.3	0.417	3579.6	449.4
0.406	2779.1	575.6	0.469	3091.0	656.4	0.458	3231.9	447.4
0.438	2404.8	568.9	0.511	2635.0	641.0	0.495	2953.2	445.5
0.466	2114.7	563.0	0.552	2275.6	627.7	0.53	2725.8	443.6
0.492	1884.8	557.7	0.59	1987.9	616.2	0.563	2537.5	441.9
0.515	1699.6	553.0	0.626	1754.7	606.2	0.594	2380.0	440.3
0.536	1548.1	548.9	0.66	1563.9	597.4	0.623	2246.8	438.9
0.556	1422.7	545.3	0.693	1406.1	589.7	0.65	2133.4	437.6
0.573	1317.8	542.2	0.723	1274.9	582.8	0.676	2036.3	436.4
0.64	986.1	530.9	0.855	868.5	558.0	0.79	1713.6	432.2
0.681	822.2	524.6	0.955	680.3	542.9	0.886	1545.9	429.9
0.705	732.2	520.8	1.029	586.4	533.2	0.972	1453.8	428.8
0.717	678.4	518.6	1.084	537.1	526.5	1.051	1401.3	428.3
						1.124	1371.0	428.3
						1.262	1342.5	428.9

Table VI.4. Relationship between nominal and realized fishing mortality rates for lobster assessment areas. Data taken from results of SARC 22.

Gulf of Maine		Georges Bank		South of Cape Cod and Long Island Sound	
Nominal Fishing Mortality Rate	Realized Fishing Mortality Rate	Nominal Fishing Mortality Rate	Realized Fishing Mortality Rate	Nominal Fishing Mortality Rate	Realized Fishing Mortality Rate
0	0	0	0	0	0
0.1	0.063496	0.1	0.078102	0.1	0.080762
0.2	0.126383	0.2	0.147666	0.2	0.152202
0.3	0.185606	0.3	0.211068	0.3	0.216051
0.4	0.239784	0.4	0.269639	0.4	0.273605
0.5	0.288599	0.5	0.324198	0.5	0.325853
0.6	0.332303	0.6	0.375294	0.6	0.373578
0.7	0.371395	0.7	0.423317	0.7	0.417404
0.8	0.406427	0.8	0.468575	0.8	0.457852
0.9	0.437917	0.9	0.511305	0.9	0.495352
1	0.466315	1	0.551705	1	0.530276
1.1	0.492001	1.1	0.589944	1.1	0.562938
1.2	0.515288	1.2	0.626163	1.2	0.593607
1.3	0.53644	1.3	0.660485	1.3	0.622523
1.4	0.555682	1.4	0.693015	1.4	0.649883
1.5	0.5732	1.5	0.723856	1.5	0.675874
2	0.640013	2	0.855332	2	0.790026

Table VI.5 Polynomial fitting models and outputs for three lobster assessment areas.

Model 1: Relation between Freal and Fnom

>model freal=a+b*fnom+c*fnom^2+d*fnom^3+e*fnom^4+f*fnom^5

Parameter	GOM	GB	SLIS
A	-0.00075	0.000312	0.000134
B	0.666022	0.814588	0.853576
C	-0.09753	-0.44431	-0.52023
D	-0.23441	0.27462	0.275817
E	0.168039	-0.11255	-0.09296
F	-0.03483	0.018967	0.013889

Model 2 : Relation between EPR and Freal

>model epr=a+b*freal^(-1)+c*freal^(-2)+d*freal^(-3)

Parameter	GOM	GB	SLIS
A	-2755.14	-2335.75	-235.833
B	2431.99	2771.65	1691.19
C	-57.289	-74.2526	-47.7234
D	0.054902	0.071532	0.046066

Model 3: Relation between YPR and Freal

>est ypr=a+b*freal+c*freal^2+d*freal^3+e*freal^4

Parameter	GOM	GB	SLIS
A	352.112	826.862	375114
B	2499.13	-95.6398	543298
C	-8618.18	-1208.32	-1290140
D	11758.4	1696.4	1155430
E	-5789.72	-680.423	-354959

Where GOM is the Gulf of Maine, GB is Georges Bank and South (Offshore), and SCCLIS is South of Cape Cod to Long Island Sound.

Table VI.6 Modeled effects of a 40% reduction in nominal effort with respect to yield and egg production for three American lobster stock assessment areas.

	GOM	GB	SCCLIS
Current Level of Fnom	1.80	0.88	3.05
Current Level of Freal	0.62	0.50	1.21
Current Level fo EPR	1013.46	2884.16	1127.76
Current Level of YPR	535.46	645.47	429.61
New Level of Fnom	1.08	0.53	1.83
New Level of Freal	0.49	0.34	0.75
New Level fo EPR	1998.16	5195.88	1926.48
New Level of YPR	557.68	712.68	431.90
Percent Change in Fnom	-40.0%	-40.0%	-40.0%
Percent Change in Freal	-21.6%	-32.6%	-37.9%
Percent Change in EPR	97.2%	80.2%	70.8%
Percent Change in YPR	4.1%	10.4%	0.5%
Maximum EPR@F=0	41734.70	48429.70	33959.40
Percent of Max EPR@Fold	2.4%	6.0%	3.3%
Percent of Max EPR@Fnew	4.8%	10.7%	5.7%

	1991-93 F (females)		SAW22
	GOM	GB	SLIS
Fnom	1.80	0.88	3.05
Freal	0.62	0.50	1.21
Reduction in Effort	40%	40%	40%
Reduced Fnom	1.08	0.53	1.83
Reduced Freal	0.49	0.34	0.75

Where GOM is the Gulf of Maine, GB is Georges Bank and South (Offshore), and SCCLIS is South of Cape Cod to Long Island Sound.

TableVI.7. Changes in Yield.

Landings in pounds ($x10^3$)

		INSHORE			OFFSHORE			
	Region/Year	GOM Inshore	GB Inshore	SCCLIS	GOM_OFF	GB_Offshore	Grand Total	Change in Total Yield
Status Quo [1]	1992	40344	181	8238	21	8514	57299	
	1993	41648	40	8001	414	7906	58009	
	1994	51898	96	10437	548	7005	69983	
	1992-94	133890	317	26676	983	23425	185291	
Best [2]	1992	42768	181	8282	21	8709	59962	4.6%
	1993	44042	40	8044	416	8091	60632	4.5%
	1994	54811	96	10492	551	7199	73149	4.5%
	1992-94	141621	317	26818	988	23999	193744	4.6%
Worse [3]	1992	40344	181	8238	21	8709	57494	0.3%
	1993	41648	40	8001	416	8091	58196	0.3%
	1994	51898	96	10437	551	7199	70180	0.3%
	1992-94	133890	317	26676	988	23999	185870	0.3%

1 Status Quo: Assumed current conditions based on SARC22 analyses
2 Best: Assuming a 40% reduction in nominal fishing effort through the US range of lobsters
3 Worse: Assuming a 40% reduction in nominal fishing effort only in th EEZ

Where GOM is the Gulf of Maine, GB is Georges Bank and South (Offshore), and SCCLIS is South of Cape Cod to Long Island Sound, Inshore is within State waters and Offshore is in the EEZ.

Estimated Revenues from Lobster Management

Procedures used to estimate aggregate domestic landings of American lobster were described above. Note that the landings reported in Table VI.7 may be thought as being long-run equilibria, assuming fishing mortality rates remain at the associated levels. Economic benefits were calculated using the three-year average from Table VI.7. Specifically, the status quo (SQ) landings were taken to be 61.76 million pounds. Similarly, average landings were 64.59 and 61.97 million pounds under the "Best" and "Worse" scenarios described above. The economic benefits of the preferred action consist of the increased industry revenues associated with the yield increases that follow reduced fishing mortality rates. The analysis compares the projected gross benefits relative to the SQ under a scenario in which the state-waters fishery adopts fishing mortality equivalent measures and another in which states are assumed to maintain current fishing mortality levels. The procedures used to estimate gross economic benefits are described below.

Anticipated reductions in fishing mortality rates are expected to result in increased landings which are likely to result in changes in ex-vessel prices. These price changes were estimated by using price flexibilities reported in Cheng and Townsend (1993). A price flexibility measures the percentage change in ex-vessel price associated with a one percentage change in quantities. For example, a price flexibility of -0.2 means that for every one percent increase in quantities, the ex-vessel price of lobster would decrease by 0.2 percent.

Monthly Landings Shares Since the Cheng and Townsend results were based on a monthly price response model, the projected landings had to be converted to a monthly basis. Monthly domestic landings from all sources were estimated from dealer weighout data for the years 1992, 1993, and 1994. These data were then used to compute a monthly average share of total annual landings. Since none of the proposed alternatives create any obvious tendencies to change the annual distribution of lobster landings, the 1992-94 average shares were assumed to hold for all alternatives and scenarios.

Prices A price flexibility defines the relationship between landings and ex-vessel prices. This requires establishing a baseline price and landings from which percentage changes in landings and the resulting price changes can be calculated. Monthly average prices were calculated from 1992-1994 weighout data. These prices were assigned to the SQ since they are consistent with the time period from which the SQ fishing mortality rates and landings were generated.

Projected Revenues Projected revenues for the SQ and the preferred alternative (PA) scenarios are reported in Table VI.8. Column 1 shows row labels. Column 2 reports the estimated 1992-94 average monthly landings shares. Column 3 reports the price flexibilities from Cheng and Townsend (1993 p. 108). Column 4 reports 1992-94 monthly average prices. Column 5 reports monthly landings for the SQ. The monthly SQ landings are the product of the total projected SQ landings (61.76 million pounds) and the associated monthly share (column 2). Column 6 reports the estimated monthly revenues for the SQ. The SQ revenues are the product of monthly landings (column 5) and 1992-94 monthly average price (column 4). Column 7 reports projected monthly

landings under the PA scenario where states are assumed to adopt equivalent fishing mortality reductions. These PA landings are the product of the projected total landings (64.59 million pounds) and landings share (column 2). Column 8 reports the associated PA monthly revenues. The monthly revenues in column 8 are computed as follows. The percentage change in landings in a given month is multiplied by the price flexibility for that month to estimate the total percentage change in ex-vessel price. For example, the PA results in a 4.56% change in landings in June. This results in a 1.95% (-0.42*4.56) reduction in the June ex-vessel price. This estimated change in price is then applied to the PA landings for the month. To carry on with the June example, the 1.95% reduction in June price results in a forecasted price of $3.53 per pound ($3.60*0.98). This price is applied to the June landings of 3.07 million pounds to get the revenues of $10.86 million reported in column 8. Column 9 reports the estimated monthly landings for the PA under the assumption that states do not implement a fishing mortality reduction program. Column 10 reports the associated PA revenues based on the landings reported in column 9 and using the same procedures just explained.

The annual totals provide an estimate of the gross revenues associated with the SQ and the two PA scenarios. The difference between the SQ and the PA provides a measure of the value of fishing mortality reduction. Assuming that states implement a comparable fishing mortality reduction program, industry revenues were projected to increase $2.13 million annually. Projected over a 10 year period at a discount rate of 7.0%, the PA would exceed the SQ by $16.09 million in present value. If states do not implement any fishing mortality rate reduction initiatives, the expected benefit of implementing the PA in the EEZ only will be greatly diminished but is still positive. Specifically, an EEZ-only effort reduction program would result in an annual net gain of $0.18 million. Projected over 10 years at 7.0%, the present value of an EEZ-only effort reduction program would be $1.22 million.

Table VI.8. Revenue Projections for SQ and PA (with and without state waters reduction)

						EEZ & State Water Reduce		EEZ Only	
Month	Landings Share (%)	Price Flexibility	Average Price ($/lb)	SQ Landings (million lbs)	SQ Revenues (million $)	PA Landings (million lbs)	PA Revenues (million $)	PA Landings (million lbs)	PA Revenues (million $)
Jan	2.14	-0.30	3.65	1.33	4.84	1.39	4.99	1.33	4.85
Feb	1.02	-0.14	4.30	0.63	2.72	0.66	2.83	0.64	2.73
Apr	0.96	-0.12	5.43	0.59	3.23	0.62	3.35	0.60	3.23
Mar	1.74	-0.21	4.65	1.08	5.01	1.13	5.19	1.08	5.03
May	3.51	-0.52	3.22	2.17	6.98	2.27	7.12	2.17	6.99
Jun	4.76	-0.42	3.60	2.94	10.59	3.07	10.86	2.95	10.61
Jul	12.18	-0.61	2.86	7.52	21.54	7.87	21.90	7.55	21.57
Aug	21.69	-0.79	2.56	13.07	33.54	13.67	33.80	13.12	33.56
Sep	21.01	-0.97	2.53	12.98	32.83	13.57	32.80	13.02	32.83
Oct	17.09	-0.80	2.46	10.56	25.97	11.04	26.17	10.59	25.99
Nov	9.58	-0.68	2.52	5.92	14.92	6.19	15.12	5.94	14.93
Dec	4.81	-0.57	3.07	2.97	9.14	3.11	9.31	2.98	9.15
Total				61.76	171.31	64.59	173.44	61.97	171.49

Economic Costs of the Final Rule

Costs imposed under the final rule consist of three general categories: costs to the lobster industry, administrative costs and enforcement burden. The costs to the industry focus on (1) costs of trap tags, tag replacement for the EEZ fishery and (2) costs to fish dealers for reporting lobster purchase data. Administrative costs consist of the cost of implementing the trap tag system and enforcement costs consist of the cost of enforcing trap allocations.

A. Costs to the Industry

Trap tag and tag replacement costs

Trap reduction schedules are evaluated for the nearshore and offshore areas. For the nearshore management areas, the preferred regulations call for 1000 traps in 1999 dropping to 800 traps in the year 2000 and beyond, pending possible substitution of conservation equivalent measures. The offshore Area 3 calls for a limit of 2000 traps in 1999 dropping to 1800 traps in the year 2000 and beyond, pending possible substitution of conservation equivalent measures.

Available data indicate that the average number of traps fished by Federal permit holders that fish in the nearshore areas is approximately 700 traps. For the nearshore management areas, the cost associated with the purchase of 700 near-shore tags at $0.14 per tag including shipping is estimated to be $98.00 per lobster permit holder in the near-shore trap sector (700 tags x $0.14 = $98.00). The total tag cost for the first year, therefore, for all 2500 permits in the near-shore sector is estimated at $245,000.00 ($98.00 x 2,500=$245,000.00). It is impossible at this time to ascertain, exactly, how many respondents would order just a percentage of their allowable tags, or what percentage they would request. For the purposes of this analysis, it is assumed that 50% (1250) will make one additional request for 10% of the allowed tags. The added costs associated with the purchase of the tags is $0.14, including shipping, at an estimated annual cost of $14.00 (100 tags x $0.14). Annualized costs, therefore, for half of the respondents to request additional tags is estimated at $17,500 (1250 x $14). The permit holders are expected to replace trap tags due to tag losses. It is expected that all of the permit holders would lose 10% of their tags. The costs for the tag replacement at $0.14 per tag for the first year would be about $24,500.00 (2500 permit holders x (70 tags x $0.14) =$24,500.00). Total tag and tag replacement costs for the first year for the near shore sector would be about $287,000.00 ($245,000 + $17,500 + $24,500).

Available data indicate that the average number of traps fished by Federal permit holders that fish in the offshore vessels is approximately 1,400 traps. With the same assumptions as the nearshore sector, total tag costs for the first year for 200 permit holders in the offshore sector fishing 1,400 traps would be approximately $39,200 for the tags (200 x (1400 x $0.14)). It is impossible at this time to ascertain, exactly, how many respondents would order just a percentage of their allowable tags, or what percentage they would request. For the purposes of this analysis, it is assumed that 50% (100) will make one additional request for 10% of the allowed tags. The added costs associated with the purchase of the additional tags is $0.14, including shipping, at an estimated

annual cost of $28.00 (200 tags x $0.14). Annualized costs, therefore, for half of the respondents to request additional tags is estimated at $2,800 (100 x $28). The permit holders are expected to replace trap tags due to tag losses. It is expected that all of the permit holders would lose 10% of their tags. The costs for the tag replacement at $0.14 per tag for the first year would be about $3,900.00 (200 permit holders x (140 tags x $0.14) =$3,920.00). Total tag and tag replacement costs for the first year for the offshore sector would be about $ 45,900.00 ($39,200 + $2,800 + $3,900).

Therefore, total tag and tag replacement costs to the lobster nearshore and offshore sectors would be about $332,900.00 ($287,000.00 + $45,900.00 = $332,900.00) for the first year.

Preferred regulations call for a trap limit for the nearshore management areas of 800 traps in the year 2000 and beyond, while the offshore Area 3 trap limit will be reduced to 1800 traps in the year 2000 and beyond. Since available data indicate the average number of traps fished by the nearshore sector is approximately 700 traps and the offshore sector is approximately 1400 traps, the estimated number of tags purchased in the year 2000 and beyond would be the same as identified in year one above, i.e. total tag and tag replacement costs to the lobster nearshore and offshore sectors would be about $332,900 for the second and subsequent years.

The present value of total trap tag and tag replacement costs to the EEZ lobster trap fishery under this alternative for 10 years at 7% discount would be approximately $2,501,821.00.

Mandatory reporting costs

As discussed in Section III of this FEIS, mandatory reporting at the vessel and dealer level on a trip by trip basis is an essential component for monitoring the eventual success of fishery management systems under consideration. The associated reporting requirements for such a program from a coast-wide state/Federal perspective are currently being developed under the auspices of the Commission's ACCSP. The ACCSP activities are generic in nature and would not only cover the data requirement for the lobster fishery management but also include the data requirements for managing the species under the Commission's jurisdiction. The mandatory reporting cost to the industry would not be incurred with any alternative lobster management system because the mandatory system has not been developed exclusively for the lobster fisheries and would not be implemented until the ACCSP is in place in the future. Therefore, there would be no increases in reporting costs in regard to the selection of the lobster management alternatives.

B. Administrative Costs

Administrative costs included here are an additional burden to the Federal government resulting from various management alternatives. Since issuance of vessel fishing permits is already a requirement, issuing vessel permits does not constitute an additional burden or increase administrative costs to the government. However, the lobster management system will impose an

additional burden to the government to administer the trap tag program. The additional administrative costs for the trap tag system are presented below.

With total traps estimated to be fished under the proposed trap tag program in year one at 2.03 million lobster traps with tags (1.75 million near-shore traps = 700 traps x 2,500 vessels; 0.28 million offshore traps = 1400 traps x 200 vessels), the estimated costs for administrating the 2.03 million tag program would be $94,506.00 for the first year. In year two and out years, the total traps estimated to be fished would remain below the trap limit at 2.03 million lobster traps with tags, the estimated costs for administrating the 2.03 million tag program would be $94,506.00 for the second year and for each of the out years.

C. Enforcement costs and burden

The enforcement activities focus on verifying lobster management area designations and enforcing the trap tag requirement. Enforcement will be required to verify that a tag is affixed to each trap, and to check if a lobster vessel exceeds its trap tag allocation. Enforcement costs should stabilize unless future management measures include additional reductions in trap limits in future years.

Uncertainties

There are several key uncertainties that could affect lobster conservation, and hence economic benefits of the measures to be implemented under the final rule. These uncertainties are: 1) the effectiveness of trap reductions as a management tool; 2) individual response to trap caps; and 3) the timing, implementation, and effectiveness of area management plans. These uncertainties are discussed in more detail below.

Trap Reductions as a Management Tool

Assuming vessel owners that are currently below the suggested trap caps do not increase the number of traps they fish, then some measure of conservation benefit may be forthcoming. In the biological model developed previously, it was assumed that fishing mortality reductions would be proportional to reductions in traps fished. However, it was also noted that this assumption was not likely to be valid and that the conservation benefits of a management system that relied principally on a trap reduction program were overstated. Richardson and Gates (1986) estimated that a 20% reduction in fishing mortality would require almost double that amount in terms of trap reductions. Based upon models developed by Fogarty and Addison (1997), Richards (1995) estimated that the fishing mortality rate could go down in proportion to trap reductions, or could actually increase depending upon how lobstermen adjust soak times to compensate for lost traps. More recently, Gates (1998) proposed a model of lobster capture that incorporates congestion externalities. In Gates' model, removal of traps from a given area would simply raise the productivity of all other remaining traps, with no corresponding reduction in fishing mortality.

Although no definitive relationships between trap and fishing mortality rate reductions have been established, the empirical and theoretical literature indicate that the relationship is not linear. Further, the scientific literature consistently indicates that substantially greater levels of trap reductions than what will be implemented through the final rule may be required to provide some measure of assurance of a reduction in fishing mortality rates (Section III.3).

Response to Trap Reductions

The trap caps implemented under the final rule exceed the average number of traps fished by nearshore and offshore vessels. Thus, the proposed trap caps leave some opportunity for increased expansion of effort in both nearshore and offshore (Area 3) EEZ waters. Assuming that there is no further outward expansion of nearshore traps into Area 3, the numbers of traps fished in nearshore areas could increase by 250,000 traps and the trap caps would permit the numbers of traps fished in Area 3 to increase by an additional 80,000 traps. If nearshore vessels continue an outward expansion into Area 3, then the potential for trap expansion in the offshore area would increase dramatically, since any such vessel would have the opportunity to avail itself of a substantially larger trap cap. Note that this would occur under the preferred action only if such vessels opted to no longer fish in the nearshore EEZ.

While the potential for escalation in traps is substantial whether or not vessels will, in fact, seek to increase trap numbers is an open question. On the one hand, an argument can be made that vessels will not seek to increase trap numbers upon implementation of a trap cap since they have the opportunity to do so now and have chosen to remain at levels below the trap cap. Alternatively, vessels may seek to increase their trap numbers simply to establish a historical level of participation in the fishery. A more compelling (and perhaps more likely) response would be to leave total traps fished in nearshore and offshore areas at levels roughly equivalent to the status quo. This would occur if every trap fished by vessels above the trap cap were to be replaced by a trap fished by vessels below the cap. Given the nature of the trap fishery, removal of traps is equivalent to giving up productive territory. This leaves other vessels with the opportunity to take over the lost ground. The Gates model of a trap fishery subject to congestion externalities provides an economic underpinning for such an outcome. As traps are removed from a given area, the productivity of all surrounding traps increases. The increased productivity provides an economic incentive for vessels to fish more traps until productivity returns to its original level. If the Gates model is an accurate representation of the biological and economic dynamic in the lobster trap fishery, then as long as trap caps remain above the average number of traps fished, there may not be any appreciable reduction in fishing mortality attributable to the trap management measures implemented in this final rule. Should this be the case, then the estimated economic benefits of the final rule may not exceed that of the status quo. Note, however, that trap caps based upon historical levels of participation would likely be less prone to trap expansion (see Section III.3 for discussion of historical participation).

Area Management Teams

The final rule delegates a substantial portion of the plan development process to the individual area management teams and the Commission. Much of the success of the final rule rests upon completion of effort reduction measures by each of the area management teams and implementation of the coast wide measures. To date, the time line for development and implementation of the Commission's area management programs may be delayed due to concerns over enforceability of trap measures without a trap tag system in place. Some of the coast wide measures are meeting resistance among individual states. For example, the increased escape vent size has not been well received. Should these coast wide and area management measures fall short of the conservation objectives, however, the final rule does provide a mechanism for separate Federal action.

Economic Effects of Non-Selected Alternatives

The variety of management measures that were developed and considered through the public hearing process would all have equivalent conservation objectives. Thus the longer run, equilibrium level of gross economic benefits (consumer's surplus and gross revenues) under any one of the different alternatives, is approximately the same. However, there were distinct features of each of the alternatives that would make one more costly than another. The potential differences in costs among the alternatives are discussed below.

Differences in Trap Tag Costs

Alternative 1 (Status Quo) : There would be no costs for trap tags because there will be no trap tag requirement under this alternative.

Alternative 3: Available data indicate that the average number of traps fished by Federal permit holders that fish in the nearshore areas is approximately 700 traps. For the nearshore management areas, the cost associated with the purchase of 700 near-shore tags at $0.14 per tag including shipping is estimated to be $98.00 per lobster permit holder in the near-shore trap sector (700 tags x $0.14 = $98.00). The total tag cost for the first year, therefore, for all 2500 permits in the near-shore sector is estimated at $245,000.00 ($98.00 x 2,500=$245,000.00). It is impossible at this time to ascertain, exactly, how many respondents would order just a percentage of their allowable tags, or what percentage they would request. For the purposes of this analysis, it is assumed that 50% (1250) will make one additional request for 10% of the allowed tags. The added costs associated with the purchase of the tags is $0.14, including shipping, at an estimated annual cost of $14.00 (100 tags x $0.14). Annualized costs, therefore, for half of the respondents to request additional tags is estimated at $17,500 (1250 x $14). The permit holders are expected to replace trap tags due to tag losses. It is expected that all of the permit holders would lose 10% of their tags. The costs for the tag replacement at $0.14 per tag for the first year would be about $24,500.00 (2500 permit holders x (70 tags x $0.14) =$24,500.00). Total tag and tag replacement costs for the first year for the near shore sector would be about $287,000.00.

With the same assumption, total tag and tag replacement costs for the first year for 200 permit

holders in the offshore sector would be approximately $45,900.00 including $39,200 for the tags, $2,800 for additional tags and $3,900.00 for replacement of lost tags. Therefore, total tag and tag replacement costs to the lobster near- and offshore sectors would be about $332,900.00 ($287,000.00 + $45,900.00 = $332,900.00) for the first year.

The out-year tag replacement cost would be reduced according to the trap-tag reduction schedule, a reduction of 10% each year up to a 40% reduction in total. This means that the tag replacement cost would be 90% of the replacement cost of the first year for the second year, 80% for the third year, 70% for the fourth year, and 60% for the fifth year and later years. The tag replacement cost, therefore, would be $299,610.00 for the second year, $266,320.00 for the third year, $233,030.00 for the fourth year, and $199,740.00 for the fifth year and future years.

The present value of total trap tag and tag replacement costs to the EEZ lobster trap fishery under this alternative for 10 years at 7% discount would be approximately $1,804,754.00.

Alternative 4: Under this alternative, we assume that a half of the near-shore permit holders would be allocated 400 traps and the another half, 800 traps. Also assumed is that a half of the offshore permit holders would be allocated 1,000 traps while the another half, 2,000 traps. With the assumptions above, total number of trap tags would be 25% lower under this alternative than the alternative 3, implying the trap tag and tag replacement costs to the industry would be reduced by the same percent (25%). In other words, the trap tag and tag replacement costs under this alternative would be at 75% of the costs under Alternative 3. Therefore, total trap tag and tag replacement costs under this alternative in the first year would be $215,250.00 for the near-shore sector and $34,425.00 for the offshore sector. The total trap tag and tag replacement costs for the fishery would be $249,675.00 ($215,250.00 + $34,425.00) for the first year, 75% of the costs under Alternative 3. For the same reason, the out-year tag replacement cost each year would be 75% of the tag replacement cost under Alternative 3.

The present value of the trap tag and tag replacement costs for 10 years discounted at 7% would also be 75% of total costs under Alternative 3 and is calculated to be $1,353,566.00 under this alternative.

Alternative 5: For the near-shore sector, the trap tag allocation program would be the same for Alternatives 3 and 5. Therefore, trap tag and tag replacement costs under this alternative would be the same at $287,000.00. For the offshore sector, 75% of the historical trap possession by permit holders would be calculated and allocated to each permit holder. The average trap possession for the offshore sector in 1995 was 1,353 traps per permit holder and thus the offshore allocation of traps (75% of the 1,353 traps) averages to be 1,010 traps per offshore permit holder. With a total of 200 offshore permit holders in the sector, total offshore traps would be 202,950 traps, about 50.7% of the total under the Alternative 3. Therefore, the offshore trap tag and tag replacement costs under this alternative would be 50.7% of the costs ($45,900.00) estimated for Alternative 3 and are calculated to be $23,271.00.

Total trap tag and tag replacement costs to the EEZ lobster trap fishery for the first year would be $310,271.00 for the two sectors ($287,000.00 + $23,271.00 = $310,271.00), about 93% of the costs under Alternative 3. The out-year tag and tag replacement costs would also be at about 93% of the costs estimated for Alternative 3.

The presented value of the tag and tag replacement costs under this alternative for 10 years at 7% discounting would be $1,679,095.00.

Alternative 6: Since there was no trap tag requirement under this alternative, no trap tag and tag replacement costs to the industry would be accrued.

Differences in Administrative Costs

Administrative costs included here are an additional burden to the Federal government resulting from various management alternatives. Since issuance of vessel fishing permits is already a requirement, issuing vessel permits does not constitute an additional burden nor increase administrative costs to the government. However, two components of the lobster management system will impose an additional burden to the government: a trap tag program and a fishing zone certification program. These two components are only prescribed for Alternatives 2, 3, 4 and 5, and not prescribed for Alternatives 1 (Status Quo) and 6 (no lobstering in EEZ). As a result, there will not be additional administrative costs for Alternatives 1 and 6. Annualized costs to the federal government for these programs include staff costs and system operation associated with processing the information. The additional administrative costs are presented below.

Alternative 1:

There are no additional costs to the government as indicated above.

Alternative 3:

With total traps estimated to be fished under this alternative at 2.03 million lobster traps with tags (1.75 million near-shore traps = 700 traps x 2,500 vessels; 0.28 million offshore traps = 1400 traps x 200 vessels), the estimated costs for administrating the 2.03 million tag program would be $94,506.00 for the first year. In year two and out years, the total traps estimated to be fished would remain below the trap limit at 2.03 million lobster traps with tags, the estimated costs for administrating the 2.03 million tag program would be $$94,506.00 for the second year. By year 3, the trap tag reduction schedule would impact traps in the water with a scheduled 10% reduction continuing until year five. Costs therefore in year three would be approximately $85,000, year four would be $75,600 and year five and thereafter would be $66,150.

Alternative 4:

The number of trap tags to be administrated under this alternative is estimated to be 1.52 million, 75% of 2.03 million trap tags estimated for Alternative 3. Assuming the administrative costs would be proportional to the number of trap tags to be administrated, the administrative cost under this alternative is estimated to be 75% of the administrative cost under Alternative 3 and, thus, would be $70,880.00 for the first year and second year. Costs would be approximately $63,750 in year three, $56,700 for year four, and $49,600 for year five and thereafter.

Alternative 5:

The number of trap tags to be administered under this alternative is estimated to be 1.87 million and is about 92% of 2.03 million the trap tags for Alternative 3. Assuming the administrative costs would be proportional to the number of trap tags to be administrated, the administrative cost under this alternative would be 92% of the cost estimated for Alternative 3, $86,945.00 for the first and second year. Costs in year three would be approximately $78,200, costs in year four would be $69,550, and in year five and thereafter costs would be approximately $60,850.

Also, it should be noted that this alternative will have an additional requirement to identify and verify the recent historical trap possession by about 200 offshore permitted vessels and allow the vessel owners to appeal to resolve trap tag allocation. The additional requirement would accrue an additional administrative task which is estimated to require a ½ staff year at the GS -7 level at the cost to the government approximately $16,000.00 for the first year.

The total administrative cost to the government under this alternative would be $102,945.00 ($86,945.00 + $16,000.00) for the first year. Since the offshore historic trap allocation determination is a one time event, administrative costs for each of the out years would be unaffected.

Alternative 6:

There will be no additional costs to the government as indicated above.

Differences in Enforcement Costs

The enforcement activities focus on enforcing the trap tag requirement and lobster fishing zones (Zones A, B, & C and a buffer zone). Since Alternatives 1 (the status quo) and 6 (no trap lobstering in the EEZ) do not require trap tags nor have a buffer zone designated between the near shore zone (Zone A & B) and the offshore zone (Zone C). Therefore, there will be no additional burden for enforcement and thus no additional enforcement costs. The additional enforcement burden is discussed for each of six alternatives below:

Evaluation of non-selected alternatives:

Alternative 1:

No increase in enforcement burden and costs as indicated above.

Alternative 3:

Enforcement burden under this alternative would increase from the status quo alternative (Alternative 1) because the enforcement will be required to check if a lobster vessel exceeds its trap tag allocation and is properly fishing in the authorized zone and/or if the prohibition against lobstering in the buffer zone is violated.

Alternative 4:

Similar to Alternative 3, the enforcement burden under this alternative would increase from the status quo alternative (Alternative 1) because of the additional enforcement requirement. However, the burden under this alternative might be slightly reduced relative to Alternative 3, due to a smaller number of trap tags to be accounted for, 75% of the Alternative 3 level.

Alternative 5:

Similar to Alternatives 3 and 4, the enforcement burden under this alternative would increase from the status quo alternative (Alternative 1) for the additional enforcement requirement. The additional burden under this alternative is estimated to be less than Alternative 3 because the number of the traps and tags under this alternative is only 92% of the level under Alternative 3, but higher than Alternative 4 because a larger number of trap tags is expected to be enforced (1.87 million trap tags under Alternative 5 verses 1.52 million trap tags under Alternative 4),

Alternative 6:

This alternative of banning lobstering in EEZ would not incur an additional enforcement burden relative to a trap allocation and trap tag program and a zoning system because lobstering is banned. Among the alternatives, this alternative has the most cost savings in terms of the enforcement burden and effectiveness.

Summary of Economic Effects

Assuming a discount rate of 7% and a 10 year planning horizon, the present value of gross revenues to lobster industry participants was estimated to range from $1.22 to $16.09 million depending upon management action in state waters. The present value of the material and administrative costs of the trap tag system was estimated to be $3.17 million. Thus, economic costs to lobster management could exceed the economic gains if states are not able to develop

management plans in concert with Federal action. The net gains would be positive under a scenario in which joint state and Federal action were to achieve comparable levels of fishing mortality reduction.

The economic effects described above are predicated upon the uncertainties described earlier with respect to assumptions about the effectiveness of management strategies that predominantly rely on trap reductions and the behavioral response by individual vessels owners to management based on trap caps rather than historical participation levels. Based upon these uncertainties, management alternatives that have more rigorous trap reduction schedules and/or that may be based upon historical participation levels may have a greater likelihood of generating positive economic benefits as compared to the measures to be implemented. Such management alternatives would likely provide additional benefits in the form of capital costs associated with reductions in the purchase and replacement of traps.

Of the management alternatives that were considered, non-selected alternatives 3 and 4 have more rigorous trap reduction schedules and non-selected alternative 5 contains elements of a more rigorous reduction schedule as well as trap allocations based upon historical participation. Given that the final rule and each of these non-selected alternatives share the same conservation objective, they would have roughly equal point estimates of economic benefit. However, within the context of the uncertainties over behavioral response to trap caps and management action in state waters, at least some of the non-selected alternatives may have a higher probability of realizing the economic benefits that effective management of lobster fishery resources may provide.

The reader is referred to Section III of this FEIS for a description of the preferred management action, and its rationale and environmental consequences. A description of the alternatives to the preferred action is presented in Section IV. Additional details concerning the preferred action and non-selected alternatives are found in the Appendix (DEIS public comments and responses).

3. COASTAL ZONE MANAGEMENT ACT (CZMA)

The principal objective of the CZMA is to encourage and assist states in developing coastal management programs, to coordinate state activities, and to safeguard regional and national interest in the coastal zone. Section 307(c) of the CZMA requires Federal activity affecting the land or water uses or natural resources of a state's coastal zone be consistent with that state's approved coastal management program, to the maximum extent practicable.

NMFS provided a copy of the DEIS and a consistency determination to the state coastal management agency in every state with a Federally-approved coastal managment program whose coastal uses or resourrces are affected by these lobster management measures. The States of Delaware, Connecticut, North Carolina, Pennsylvania, and New York have agreed with the consistency determination. The States of Maine, New Hampshire, Massachusetts, Rhode Island,

New Jersey, Maryland, and Virginia did not respond within the statutory time period and agreement with the consistency determination is inferred.

NMFS has determined that these proposed regulations will be implemented in a manner that is consistent to the maximum extend practicable with the coastal zone management programs of the Atlantic states that have approved programs.

4. PAPERWORK REDUCTION ACT (PRA)

The proposed regulations contains collection-of-information requirements subject to the PRA. A PRA package has been prepared and submitted to the Office of Management and Budget for approval. The requirements pertaining to lobster management area designations, administration of a lobster trap tag program, and revision of the existing gear (trap) marking requirement by substitution of a trap tag in place of current trap marking requirements are proposed new collection-of-information requirements that have been submitted to OMB for approval.
The estimated time per individual response is shown.
1. Revision of existing gear (trap) marking requirements (1 minute);
2. Lobster management area designation, request for trap tags, and preparing payment for trap tags (5 minutes);
3. Reporting lost trap tags and requesting replacement trap tags (3 minutes);
4. Requests for additional trap tags (2 minutes); and
5. Extend observer coverage to include the American lobster fishery (2 minutes).

Rationale: The new collection of information required for this action will prevent uncontrolled increases in the number of traps used by vessels fishing for lobster using traps. The first provision of this action would require that vessels fishing for lobster using traps select one or more lobster management area designations; one of six EEZ Nearshore Management Areas (Area 1, Area 2, Area 4, Area 5, Area 6, and/or the EEZ Nearshore Outer Cape Management Area) , the Area 2/3 Overlap, or the EEZ Offshore Management Area 3. To aid in enforcement and administration of the program, lobster vessel owners will be required to carry a Lobster Fishing Certificate onboard their vessel. This Certificate will identify what management area designation(s) the vessel is enrolled in and the maximum amount of trap tags that a vessels is allowed. The second provision would require that each lobster trap fished carry one tag, permanently marked with the vessels limited access permit number as a means of gear identification, to replace an existing gear identification requirement which this agency is currently seeking approval for under OMB Control #0648-0351.

To begin the effort reduction program, owners must declare that their lobster vessel will be fishing in one or more of the EEZ Nearshore Management Areas or the EEZ Offshore Management Area (i.e., select a designation on a form provided by NMFS). The second lobster vessel effort reduction measure involves trap tags. Owners of vessels fishing for lobsters using traps that declare into one or more of the EEZ Nearshore Management Areas or EEZ Offshore Management Area 3 must request an appropriate number of trap tags, and vessel owners would

then be required to tag lobster traps with one tag.

If the original tags are lost -- weather, gear conflicts and unforeseen events occasionally cause the loss of lobster traps -- the vessel owner or representative are required to report lost tags after the tags have been discovered missing, lost or destroyed, to the Regional Administrator. The vessel owner may also make a request for replacement tags, up to 10% of the maximum tags allowed for the designated management area(s) chosen, to the R.A. The use of a restricted number of tags will prevent uncontrolled increases in numbers of traps used by vessel operators. This provision can only be promulgated by requiring that lobster vessel owners submit an additional form electing their lobster vessel management area designation. Additionally, vessel owners may request an appropriate number of replacement trap tags and send a check for the cost of the tags. If the maximum number of tags are not requested on the initial form, supplemental requests for additional tags via an additional form will be allowed. In subsequent years, the request for vessel management area designations and tags will be part of the annual permit renewal applications. Any need for additional tags throughout the year will require a separate request.

The following collection-of-information requirements are being restated and have already been approved by OMB control number 0648-0202 with the response times per application as shown: vessel permit applications (30 minutes for a new application, 15 minutes for renewal applications), confirmations of permit history (30 minutes); operator permit applications (1 hour); and dealer permit applications (5 minutes).

The following collection-of-information requirement is being restated and has already been approved by OMB under control number 0648-0350: vessel identification requirements, estimated at 45 minutes per vessel.

The following collection-of-information requirement is referred to and has already been approved by OMB under control number 0648-0309: experimental fishing exemption, estimated at one hour per vessel.

5. ENDANGERED SPECIES ACT (ESA) AND MARINE MAMMAL PROTECTION ACT (MMPA)

Relevance of Federal management for American lobster to the ESA and MMPA was addressed in the DEIS. A formal Section 7 consultation under the ESA was initiated for this action in a biological opinion. The consultation considered the following: 1) assessment of impacts from the final rule to withdraw the Federal lobster FMP from the MSA, 2) actions to transfer lobster management authority to regulations issued under the ACFCMA, and 3) new information on the status of endangered and threatened species under NMFS jurisdiction. The Section 7 consultation on current Federal action was concluded with a Biological Opinion issued on December 17, 1998. After reviewing the best available information on the status of endangered and threatened species under NMFS jurisdiction, the environmental baseline for the action area, the effects of the action, and the cumulative effects, it is NMFS' biological opinion that the continued operation of the

Federal lobster fishery, with modification to reduce impacts of entanglement through the ALWTRP, may affect but is not likely to jeopardize the continued existence of the northern right whale, humpback whale, fin whale, blue whale, sperm whale, sei whale, leatherback sea turtle, and loggerhead sea turtle and is not likely to destroy or adversely modify critical habitat that has been designated for the northern right whale. The ALWTRP is designed to reduce the likelihood of serious injury or mortality of large whales resulting from entanglement to acceptable levels as defined by MMPA by April 3, 2001.

6. EXECUTIVE ORDER 12612

This rule does not contain policies with Federalism implications sufficient to warrant preparation of a Federalism assessment under E.O. 12612.

7. MAGNUSON-STEVENS ACT

Compliance with National Standards

ACFCMA requires that Federal regulations be consistent with the national standards of the Magnuson-Stevens Act.

These Federal regulations are consistent, to the extent possible, with National Standard 1 because they, in concert with state regulations, are designed to prevent overfishing and achieve optimum yield on a continuing basis. The degree to which the current management strategy under the Commission plan will achieve ISFMP objectives and ensure maximum sustainable yield on a stock by stock basis will be further assessed by state and NMFS fishery experts through scientific peer review, currently scheduled for July, 1999. If NMFS believes that measures to meet the egg-rebuilding schedule which forms the basis of the Commission plan are not sufficient to end overfishing and rebuild stocks of American lobster, it will seek public comment on additional or substitute measures to rebuild lobster stocks.

In addition, section 304(c) of the SFA requires the establishment of a stock rebuilding plan for all overfished stocks. On September 30, 1997, NMFS issued its list of overfished fisheries, which includes the American lobster fishery. NMFS, in consultation with the Commission, will afford special attention to a refined evaluation of the relative contributions of egg production, stock biomass, and population size composition toward meeting stock rebuilding objectives. The ISFMP's rebuilding schedule calls for a threefold increase in lobster egg production in the Gulf of Maine from 1999-2005. The ISFMP also calls for a sixfold increase in egg production on Georges Bank and South and a fourfold to fivefold increase in the southern Cape Cod-Long Island Sound region over the same time period. The rebuilding schedules correspond to a substantial decrease in fishing mortality rate and an increase in yield per recruit. If achieved, the higher levels of egg production should improve the outlook for stock rebuilding, resulting in positive conservation and economic benefits.

National Standard 2 requires that management measures be based upon the best scientific information available. The information base for these management measures incorporates the most current peer-reviewed information available on the stock status of the American lobster. This information confirms the overfished status of the resource and supports a reduction of fishing effort to minimize the potential for a stock collapse.

National Standard 3 requires, as practicable, that an individual stock be managed as a unit throughout its range, and that interrelated stocks be managed as a unit or in close coordination. Three stock areas for American lobster have been defined: (1) The Gulf of Maine; (2) Southern Cape Cod to Long Island Sound; and (3) Georges Bank and south to Cape Hatteras. The three stocks would be managed, throughout the range of the population from Maine to North Carolina, through an area management approach in coordination with state jurisdictional management through the Commission's American lobster ISFMP.

National Standard 4 requires that conservation and management measures not discriminate between residents of different states. The preferred regulations for the EEZ were developed in consultation with the Commission and the lobster industry and take into account the social and economic distinction between the nearshore and offshore EEZ fisheries. The regulations strive to maintain historical participation levels in the U.S. American lobster fishery.

National Standard 5 requires that, where practicable, conservation and management measures promote efficiency in the utilization of fishery resources. The excess of fishing gear is the primary reason for the overfished condition of the American lobster resource. The increase in the number of lobster traps in recent years has likely reduced the net income of most lobster fishermen. The capping and reduction of fishing effort provides a means to reduce excessive levels of fishing gear and to improve economic efficiency. Continued reductions in fishing effort, however, will likely reduce gross revenues by more than 5 percent, or require significant changes in business operations for a substantial number of individual entities for at least some portion of the stock rebuilding period. The primary intent of the trap reduction schedule is to afford the necessary level of resource protection to prevent overfishing, and promote rebuilding, of the American lobster population.

National Standard 6 requires that conservation and management measures take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The preferred regulations take into account the variations in fisheries, fishery resources, and catches between the nearshore and offshore EEZ fisheries through the differential trap limits for the trap gear sector and through a possession limit designed to maintain historical participation by the non-trap fishery. The proposed higher trap limit for Federal permit holders in the offshore EEZ fishery is based upon the historical character and economics of that industry sector. Additionally, adaptive management measures enable future consideration of state/Federal collaboration efforts, in consultation with the lobster industry, to accommodate specific industry needs on an area by area basis.

National Standard 7 requires that, where practicable, conservation and management measures minimize costs and avoid unnecessary duplication. The implementation of a lobster trap tag program and a gear requirement to increase the minimum escape vent size in lobster traps, for example, will increase industry costs. NMFS proposes to avoid unnecessary duplication of the trap tag requirements by the establishment of alternate state-EEZ tagging programs. NMFS may, by agreement with state agencies, recognize trap tags issued by those agencies endorsed for fishing for lobster in the EEZ, provided that such tagging programs accurately identify persons who fish in the EEZ, and that NMFS can either individually, or in concert with the state agency, act to suspend the permit or license for EEZ fishing for due cause. Alternate state-EEZ tagging programs may be established through appropriate agreement with interested states. These management measures and their associated cost would assist in ending overfishing and uncontrolled increases in numbers of traps used by vessel operators. Additional requirements relating to mandatory reporting for Federal permit holders would be addressed by NMFS and state fishery management agencies during the development of the Commission's ACCSP in a manner to avoid unnecessary duplication between state and Federal reporting requirements.

National Standard 8 requires that, consistent with fishery conservation requirements, conservation and management measures take into account the importance of fishery resources to fishing communities. There would likely be some initial negative effects on fishing communities. However, the rebuilding of stocks would benefit fishing communities throughout the Atlantic coast historical range of American lobster. Sustained participation of communities and consideration of economic impacts would be facilitated by industry participation through the ISFMP's area management provisions. Data currently available cannot fully describe levels of fishing effort in the EEZ. However, the provisions associated with the management action would allow, in collaboration with the Commission and state fishery agencies, consideration of alternative conservation-equivalent management measures on an area by area basis to meet industry needs and help alleviate any adverse impact management measures might otherwise have on fishing communities.

National Standard 9 requires that, to the extent practicable, conservation and management measures minimize bycatch. The implementation of an increase in the minimum size of escape vents in lobster traps will allow an increase in esapement of sexually immature lobsters, thereby allowing a greater number of lobster to survive and reproduce. This will facilitate achievement of the egg production and stock rebuilding objectives of the ISFMP.

National Standard 10 requires that, to the extent practicable, conservation and management measures promote the safety of human life at sea. Reduction in number of lobster traps used by fishermen may result in more frequent tending (reduced soak time) of lobster gear by individual fishermen, but the specific effects of the potential regulations on fishing activities are unknown.

VII. FEIS CIRCULATION LIST

A copy of the FEIS is being forwarded to the following individuals representing government

agencies and industry organizations. Other interested parties may obtain a copy **via NMFS Northeast Region Homepage on the Internet at http://www.nero.nmfs.gov/ro/doc/nr.htm or from** NMFS Northeast Region, State, Federal, and Constituent Programs Office, One Blackburn Drive, Gloucester, MA 01930 (telephone: 978-281-9234).

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IX. APPENDIX - DEIS PUBLIC COMMENTS AND RESPONSES

NMFS received several hundred written and oral comments on the American Lobster DEIS during the public comment period which ran from March 27 - May 19, 1998. NMFS held 13

public hearings in nine states on the DEIS and comments were received from representatives for two U.S. Senators, one U.S. Representative, the U.S. Coast Guard, the Environmental Protection Agency, the New England Fishery Management Council, the Atlantic States Marine Fisheries Commission, seven state fishery agencies, six state conservation agencies, two Maine state senators, five Maine state representatives, the Governor of Maine, ten fishing industry associations, seven environmental groups, and two hundred and ninety nine individuals. All of the comments were carefully considered.

A. Public Hearings

The hearings were on the following dates at the listed locations. A total of 1124 individuals attended the hearings and 209 individuals provided testimony at the public hearings, which were held from April 27, 1998, through May 19, 1998

The dates, time, and locations of the hearings were as follows:

1. Monday, April 27, 1998, 3 p.m. -- Fuller School Auditorium, 4 School House Road, **Gloucester, MA**.

2. Tuesday, April 28, 1998, 3 p.m. -- Emmanuel Baptist Church Assembly Hall, 156 High Street, **Portland, ME**.

3. Wednesday, April 29, 1998, 3 p.m. -- Rockland District High School Auditorium, 400 Broadway, **Rockland, ME**.

4. Thursday, April 30, 1998, 3 p.m. -- Downeast Convention Center at the Holiday Inn, 215 High Street (U.S. Routes 1 and 3), **Ellsworth, ME**.

5. Friday, May 1, 1998, 3 p.m. -- University of Maine at Machias, Reynolds Center Gym, 9 O'Brien Avenue, **Machias, ME**.

6. Tuesday, May 5, 1998, 3 p.m. -- Urban Forestry Center, 35 Elwyn Road, **Portsmouth, NH**.

7. Wednesday, May 6, 1998, 3 p.m. -- Narragansett Town Hall Assembly Room, 25 Fifth Street, **Narragansett, RI**.

8. Thursday, May 7, 1998, 3 p.m. -- Howard Johnson Hotel, Dickens Room, 1052 Boston Post Road, **Milford, CT**.

9. Friday, May 8, 1998, 1 p.m. -- Quality Inn of Tom's River, 815 Route 37 West, **Tom's River, NJ**.

10. Monday, May 11, 1998, 6 p.m. -- Massachusetts Maritime Academy, Admirals Hall, Harrington Building, 101 Academy Dr., **Buzzards Bay, MA**.

11. Thursday, May 14, 1998, 3 p.m. -- Ramada Inn, Exit 72, Long Island Expressway and Route 25, **Riverhead, NY**.

12. Monday, May 18, 1998, 5 p.m. -- North Carolina Aquarium on Roanoke Island, Airport Road, **Manteo, NC**.

13. Tuesday, May 19, 1998, 5 p.m. -- Sheraton Fontainebleau Hotel, 10100 Coastal Highway, **Ocean City, MD**.

Both state and congressional representatives stressed the need for NMFS to listen carefully to the public comments and remain open minded on future management plans. Flexibility in managing the lobster resource was strongly supported and area management was encouraged. The Commission's ISFMP Amendment #3 was identified as the most effective, yet flexible method for joint, seamless state-Federal management of the resource.

1. Gloucester, MA - April 27, 1998

Location: **Fuller School Auditorium, 4 School House Road, Gloucester, MA.**
Time: 3:00 p.m. - 4:35 p.m.
Weather: Sunny and warm.
Attendance: 40 - individuals that filled out the sign-in sheet.

Introduction:

For all hearings unless otherwise noted:

Kevin Chu, NMFS Special Assistant to the Regional Administrator and Harry Mears, Director, State, Federal, and Constituent Programs Office provided the introductory remarks. The audience was informed of the hearing agenda: introduction of NMFS representatives; a summary of current trap and non-trap measures presented in the DEIS including the proposed regulatory schedule; hearing open to public comment, first by the presiding state official, followed by Federal, state, and local government officials or their representatives, then the general public who indicated a desire to speak when initially registering, and then an open podium for others wishing to comment; summary and closing remarks by a NMFS representative.

Public Comment (for all hearings):

Comments were solicited as a whole, not by the DEIS document section or subject.

Overview:

Mr. Philip Coates, Director, MA Division of Marine Fisheries provided the initial public comment and volunteered to sit at the head table with NMFS officials. Public comments were provided by 12 individuals. Support for a gauge increase appeared to receive the most support from the public. Recent disclosure of Canadian measures to raise the gauge size in several Canadian Lobster Harvesting Zones was viewed as a positive step towards joint cooperation. Most speakers supported a trap limit, but there was less support for continued reductions beyond the initial cap of 800 traps with concern expressed if reductions continue to 480 traps. Of the six trap alternatives identified in the DEIS, Alternative 2 received the most support while Alternative 4 was identified as a bad idea due to the perceived difficulty in providing the necessary historical documentation. Of the three non-trap alternatives, Alternative 1 received the most support. Some speakers specifically expressed support for the following management measures; v-notch, maximum size, and mandatory reporting. No one spoke in support of the buffer zone concept.

General Comments:

NMFS can't know all measures to restore the resource up front, implement a few and see what happens.
Groundfish restrictions will force shift and increase lobster effort .
Supports uniformity in laws throughout all states.
Return of groundfish may be bad for lobsters due to predation.
Hope NMFS listens to industry
Continue to work with Canada
Support ban on spearing lobsters

Trap Alternatives:

DEIS unfairly bashes the Commission plan, but its been implemented.
Commission plan does have time certain measures.
Support Alternative #2 = Commission plan.
Opposes ALT.#3. Zones are complicated and confusing and just use Commission zones. Commission plan does have trap limits.
Alt.#4 - oppose, too complicated, no mandatory reporting so how can NMFS document historic participation? Also creates conflict between fishermen.
Supports ISFMP, but NMFS should hold a club to ensure progress.

Trap Limits:

Can't make a living on only 480 traps.
Go no lower than 800 traps.
Supports limits, good approach.
Trap limits: 600 is a better lower limit than 480.
Need trap limit immediately.
Trap reductions may help lobstermen, but questions benefits to lobsters.

Trap Reductions:

NMFS doesn't prove trap reductions will end overfishing.
No one knows the conservation equivalency of an 80 trap reduction.
Supports trap reductions, but it needs to be substantial.

Buffer Zone:

Opposed as a mandatory requirement, should be reviewed by zone.
Opposed to buffer zone unless also closed to draggers

Zone/Area Management:

Should be able to fish in more than one zone.

No to zone approach.

Maximum Size:

Implement a max. carapace size regulation immediately.

5 inch max. size doesn't make sense and is directed at mobile gear.

Supports a max. size.

Minimum Gauge/Carapace Size:

Implement a gauge increase.

Support Canadian cooperation.

Implement gauge increase immediately.

Supports gauge increase.

Supports gauge increase up to one molt larger, go up 1/16th inch immediately.

Supports gauge increase as most effective measure.

Need at least 1/8" gauge increase immediately.

Non-Trap Alternatives:

Ban the non-trap fishery.

Support Alt. #1 = 100/500 even though it is too high a limit for most lobstermen.

Oppose Alt. #2. It will lead to different regulations from the Commission and state regulations and create enforcement problems.

Remove the "or (lobster) parts thereof".

Alt.#2 would increase effort.

Alt.#1 is best 100/500.

Non-trap sector is the only sector to take conservation measures in the past five years.

All fishermen, trap & non-trap, have a right to take lobsters

Statistics and Data:

Support mandatory reporting.

Supports mandatory reporting, but make it simpler with program similar to Mass. with an annual reporting requirement.

License Moratorium:

Shouldn't allow transfer of permit to vessels that are much larger than original vessel.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Nicole Bouchard, Sam Nadeau, Deirdre Kimball.

Federal, state, and local government officials or their representatives:

Phil Coates, Director, Massachusetts Division of Marine Fisheries. Mr. Coates described the many areas where the state of Massachusetts lobster regulations are now or soon will be similar to many of the management measures described in the DEIS including; limited entry, mandatory reporting of harvest, trap limits, non-trap trip limits, and trap tag requirements. Mr. Coates also stressed the current and continuing need for joint cooperation in managing the lobster resource.

Known Media Coverage:

Newspaper(s) -
Gloucester Daily Times

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 40
NUMBER SPEAKERS: 12

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

7	Increase the carapace gauge size
6	Support a Trap Cap
2	Support continued trap reduction
2	Support for trap alternative: ISFMP-alternative #2;
2	Support mandatory reporting
2	Support 5 inch maximum carapace size
2	Support Non-trap alternative#1
1	Continue the moratorium on new licenses.
1	Support non-trap alternative#2
1	Ban the non--trap harvest of lobsters;

1 Eliminate the buffer zone or ban all fishing in the zone by all gear types,
1 Allow to fish in more than one zone
1 Restrict vessel upgrades when license is transferred
1 No support for a maximum carapace size
1 Go no lower than 800 traps
1 480 traps is too low
1 Do not increase the carapace gauge size

2. Portland, ME - April 28, 1998

Location: **Emmanuel Baptist Church Assembly Hall, 156 High Street, Portland, ME.**
Time: 3:00 p.m. - 5:45 p.m.
Weather: Sunny and warm.
Attendance: 129 - number of individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 26 individuals. Overall, several issues were repeatedly highlighted and the following is a brief description of the issues presented in general order of frequency of occurrence. The speakers expressed strong doubts about the adequacy and accuracy of current statistical and biological data on the resource, especially in Maine; voiced support for Alternative-2; requested NMFS continue the moratorium on new licenses; supported a ban on the non-trap harvest of lobsters; requested NMFS eliminate the buffer zone or ban all fishing in the zone by all gear types, not just traps; requested NMFS and the individual states aggressively enforce current conservation measures, especially the v-notch regulations in other states; supported a 5 inch maximum carapace size throughout the range of the resource; requested NMFS go no lower than 800 traps inshore; and increase the carapace gauge size. In addition several speakers questions the validity of a larger trap allocation for the "offshore" fishery and stated that severe trap reductions in Federal waters would force effort inshore to the detriment of inshore fishery.

General Comments:

Too much gear inside.
Feds should look at a Lobster Permit Buyback Program.
Stripers eating a lot of juvenile lobsters.
Need study of striped bass consumption of lobsters.
Need mandatory reporting.
If too many lobsters, then more susceptible to disease.
NMFS plan moves too fast
Take advice of Effort Management Teams
Appreciate change to tell NMFS fishermens' views on management
Listen to the fishermen
Want a menu approach to management
Opposed to mandatory reporting

Single Federal plan undermines Zone councils. Work with zone councils to develop measures.
Conservation works because people believe in it.
Wants loss of license if caught breaking the law.
Ban dragging inside 30 miles and ban pots outside 30 miles.

Science/Biology:

Assessment is an overstatement of condition of resource in Maine, there is a healthy brood stock offshore.
Scientific stuff - assumption, estimates, etc. If cut traps, how can DEIS say we'll land more?
Don't regulate on intuition.
Questions science.
Not enough data.
He catches tons of berried females.
Not happy with science - no tagging.
Landings numbers are bad, need better data.
Doesn't believe need final details spelled out, but review if targets aren't met.
Better sea sampling needed.
Traps feed lobsters, it's like aquaculture.

License Moratorium:

Need limited entry in Maine.
Extend moratorium.
Need Limited Entry in Maine. Too much gear inside.
Support moratorium.

Trap Alternatives:

Go with ISFMP Alt. #2. It's been a compromise process.
Need seamless regulations state/Federal.
ISFMP Alt. #2 is good: it has v-notch, non-trap limits, oversized protection in Area 1.
Feels Alt. #2 does address overfishing definition
Fed's will force effort into state waters.
Offshore shouldn't get more traps than inshore.
Offshore cut number of traps, recommends 1000 traps.

Trap Limits:

Trap limits no good.
Don't regulate number of traps.
Other ways rather than reducing number of traps.
Trap limits should start offshore first to give state time to get its' limit in place.

Buffer Zone:

Oppose buffer zone.
Buffer Zone takes 10 miles from inshore fishery.
Buffer Zone - ban draggers.
Buffer zone - not good if open to trawlers and habitat impacts.
Wants buffer zone, but only if trawlers also banned.

Trap Reductions:

Support trap reduction if uniform.
How can number of traps equate to saving lobsters.
Oppose dropping traps below 800.
Concerned about latent effort.
Cannot lower traps without ban on new entrants.
Reducing traps may increase cannibalism.

NMFS cannot predict effect of trap reductions on lobster conservation.
Would cause socio-economic disruption.
Our way of life is at stake.

Non-Trap Alternatives:

Ban dragging on lobsters.
Draggers bad, with dragging one out of 10 lobsters gets mutilated.
Non-trap 500/trip isn't easier to enforce.

Should not limit traps without limiting mobile gear.

Minimum Gauge/Carapace Size:

Support gauge increase.
Support: v-notch, vent increase, large size.
Increase gauge by 1/16th inch asap.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Nicole Bouchard, Rich Maney, Teri Frady.

Federal, state, and local government officials or their representatives:

Angus King, Maine Governor
Charles Summers for U.S. Senator Snowe
John Kelly, Maine Legislative Staff, Augusta.
Gary Reed for U.S. Senator Collins.
David Etnier, Maine State Representative - District 51.
Wendy Pieh, Maine State Representative - District 56.
Penn Estabrook, Maine Dept. Of Marine Resources.
Terry Stockwell, Maine Dept. Of Marine Resources.
Chris Finlayson, Maine Dept. Of Marine Resources.
Joe Fessenden, Maine Dept. Of Marine Resources, Enforcement.
Laura Taylar, Maine Dept. Of Marine Resources.

Both state and congressional representatives stressed the need for NMFS to listen carefully to the public comments and remain open minded on future management plans. Flexibility in managing the lobster resource was strongly supported and area management was encouraged. Alternative 2 (ISFMP) was identified as the most effective, yet flexible method for joint, seamless state Federal management of the resource.

3. Rockland, ME - April 29, 1998

Location: **Rockland District High School Auditorium, 400 Broadway, Rockland, ME.**
Time: 3:00 p.m. - 5:35 p.m.
Weather: Sunny and warm.
Attendance: 242 - number of individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 21 individuals. Overall, several issues were repeatedly highlighted and the following is a brief description of the issues presented in general order of frequency of occurrence. The speakers voiced support for the ISFMP-alternative #2; expressed strong doubts about the adequacy and accuracy of current statistical and biological data; supported a ban on the non-trap harvest of lobsters; requested NMFS eliminate the buffer zone or ban all fishing in the zone by all gear types; questioned why the offshore sector received a higher trap allocation than the nearshore sector; voiced concern that Federal restrictions would force effort inshore; supported a 5 inch maximum carapace size; supported an increase the carapace gauge size; requested NMFS aggressively enforce current conservation measures, especially the v-notch regulations in other states; supported continuing the moratorium on new licenses; supported a ban on diving for lobster; and did not support trap tags.

General Comments:

Fed's should ban diver harvest.
Striped bass eating lots of lobster.
Groundfish stocks are down, kelp coverage is up, so lobsters up.
Need better data - support logbooks.
Other states not enforcing v-notch and taking mutilated tails.
We are aquaculturing lobster with all the bait and traps in the water.
Trap tag takes 2-3 weeks to replace lost tags in Maine.
Work with Zone Councils.
Oppose trap tags.
Maine lobstermen value self rule.

Trap Alternatives:

Need state-fed cooperation.
Support ISFMP Alt.#2.
Alt. #3/4/5 trap reduction too severe, will cause effort to move inshore.
Good to have Alt. #2 in DEIS.
Alt. #2 best. Others are draconian.
Alt. #2 does meet legal requirements.
Alt. #2 better, but want Maine state zones to regulate Maine lobstermen.
In Zone 3, why more traps?
Focus restrictions on offshore sector, less people impacted.
Federal regulations would force 600K traps inshore.
No to Alt. #3, 4, and 5.
Push back trap limits so both feds and states are on same time line.
Why offshore get more traps - not fair!
Offshore resource feeds inshore fishery.
Offshore limits too high.

Science/Biology:

Need more information, force other states to comply.
Landings and biological data bogus.
Science flawed
Offshore population is declining.

V-notch and maximum size benefit aren't fully accounted for.
Need sea samplers.
Base regulations on solid information and in scale with problem.
Focus on what other measures equate to number of traps.
Should protect brood stock offshore.

Non-Trap Alternatives:

Continue limit on non-trap landings.
Support ban on non-trap.
Non-trap: ban harvest.
Non-trap landings are higher than reported.
Non-trap limit to 100 lbs. Not 100 count.
Ban dragging or restrict.

Buffer Zone:

No to Buffer Zone unless closed to draggers.
Buffer Zone dumb. Ban for all gear types if you implement it..
Make it 20 miles wide, 30-50 miles.
35-45 miles is better than 30-40 miles.

Trap Limits:

Trap limits don't work.
Stop @800 traps.
Trap limits at 400 are too low & will force more traps inshore.
If traps drop to 480, he'll give up permit.
Put real trap limits in place, 2000 traps isn't strict enough offshore.
Trap reductions would help with "elbow room", but not conservation.
Data indicating the # of people effected by 480 trap limit is wrong, it is too low.

Increase Carapace Size:

Increase gauge size.
Gauge increase better than continued trap reductions.
Increase gauge immediately.
Support v-notch everywhere.

Maximum Carapace Size:

Support 5".
Maximum size whole length of coast.
Raise gauge.
If increase minimum size, maybe increase the maximum size proportionately.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Nicole Bouchard, Rich Maney, Teri Frady.

Federal, state, and local government officials or their representatives:

Other NMFS Officials Attending:
Peter Marckoon.

Other Known Government Officials:
Dayle Ashby for U.S. Senator Collins.
Penn Estabrook, Acting Commissioner, Maine Dept. Of Marine Resources.
Terry Stockwell, Maine Dept. Of Marine Resources
Wendy Pieh, Maine State Representative-District 56.
Pat Percy for Maine State Senator Mary Small-District 19.
Royce Perkins, Maine State Representative-Penobscot.
Brian Tolman, Maine Dept. Of Marine Resources, Marine Patrol.

Both state and congressional representatives stressed the need for NMFS to listen carefully to the public comments and remain open minded on future management plans. Flexibility in managing the lobster resource was strongly supported and area management was encouraged. Alternative #2 was identified as the most effective, yet flexible method for joint, seamless state-Federal management of the resource.

Known Media Coverage:

TV Stations:
Bangor TV Station
Portland's Fox TV affiliate
Newspaper(s) -
Rick Thackeray, Lincoln County News-Damariscotta.
Rockland Courier Gazette.
Bangor Daily News

Meeting tape recorded, 2 cassettes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE 242
NUMBER SPEAKERS 21

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

11 Support for Commission Plan - alternative #2.
8 Question adequacy and accuracy of current statistical and biological data.
7 Ban the non-trap harvest of lobsters.
4 Eliminate the buffer zone or ban all fishing in the zone by all gear types.
4 Offshore participants should have same trap cap as inshore.
3 Support 5 inch maximum size.
3 Increase the carapace gauge size.
2 Aggressively enforce current conservation measures.
1 Trap tags are not a good idea.
1 Ban divers.
1 Continue the moratorium on new licenses.

4. Ellsworth, ME - April 30, 1998

Location: **Downeast Convention Center at the Holiday Inn, 215 High Street, Ellsworth, ME.**
Time: 3:00 p.m. - 6:00 p.m.
Weather: Sunny and warm.
Attendance 258 - number of individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 28 individuals. Overall, several issues were repeatedly highlighted and the following is a brief description of the issues presented in general order of frequency of occurrence. The speakers supported a 5 inch maximum carapace size throughout the range of the resource; expressed strong doubts about the adequacy and accuracy of current statistical and biological data on the resource, especially in Maine; voiced support for Alternative-2; supported a trap cap; supported a ban of the non-trap harvest of lobsters; supported v-notch regulations throughout the range of the resource; did not support the moratorium on new licenses; supported cuts in offshore effort only; requested the entire resource be managed under one unified set of regulations; requested NMFS go no lower than 800 traps; requested NMFS eliminate the buffer zone or ban all fishing in the zone by all gear types, not just traps; and requested only owner/operators be allowed to harvest lobsters in the EEZ . In addition several speakers questions the validity of a larger trap allocation for the “offshore” fishery and stated that severe trap reductions in Federal waters would force effort inshore to the detriment of the inshore fishery. There was also some support voiced for; increasing the minimum gauge size; continuing the license moratorium; placing no restrictions on numbers of traps; not using the zone concept; and not requiring mandatory reporting.

General Comments:

We are aquaculturing lobster with bait.
Federal gov. should worry more about offshore lobster, it is the brood stock.
No to logbooks.
NMFS should only allow owner-operated lobster vessels.
Let Zone Councils work.
Heritage is important.
Listen to lobstermen.
NMFS should explore new options, how to redirect effort on to other less utilized species.

Maximum Size:

Do a maximum size.
Support maximum size and ban dragging.
Maximum size good, extend it everywhere.
5" maximum good.
5" maximum everywhere. Adopt Maine regulations everywhere**.**
Support 5" maximum.
5" maximum works.

Statistics/Data and Science/Biology:

Bannister Report - didn't do independent review of SAW, just used data provided by fed. scientists.
Questions science.
Data collection - Congress working to get more money for near-shore sea sampling.
Bad data, question science.
Not overfished, dispute science.
Fund Bob Stenick
Many sub-legal lobsters have eggs.
Offshore may be brood stock for entire fishery.

Trap Alternatives:

Too many procedures! Overlap of jurisdictions - why? Bogus proposals.
Trap reductions too severe. Force effort into state waters.
ISFMP-Alt. #2 good. Other alternatives go too far too fast.
Support local management and single strategy.
Alt. #4 bad cutting traps too low for new entrants.
ISFMP-Alt. #2 best available.
ISFMP-Alt. #2 is not good, but its' the best available option unless you leave Maine zones to manage their own areas.
Reduce effort offshore first; less disruptive then cuts inshore.

Trap Limits:

There are a lot of traps out there now.
A trap cap is O.K.
800 Traps OK, no lower.
Focus on offshore restrictions.
Trap limits - NO.
Inshore let states decide.
At 480 traps, most people would fish alone, leading to safety concerns and economic disruptions.

Non-Trap Alternatives:

Ban dragging.
Ban draggers.

Conservation Equivalent Measures:

V-notch good**.**
Do not increase gauge size.
Encourage v-notch offshore**.**
V-notch: use Maine's v-notch rather than the Commission's's.
Vent size good. Gauge size good.

Yes to a v-notch.

License Moratorium:

No support for moratorium continuation**.**
Need limited entry.
Moratorium no good, need to allow younger fishermen in to industry.
Without limited entry, trap reductions would just give someone else a job.
Offshore Lobster Permit should have transferability to family members, he can't transfer permit to his own son.
Federal permit should be open to new entrants.

Trap Reductions:

Federal cuts will force effort into state waters.
Trap limits 800 is lowest we should go. Trap limits @ 480 result in layoff of stern man.
400 traps bad for new or young participants, its' too low.

Buffer Zone:

Bogus = 480 traps and buffer zone ideas.
Buffer zone - bad unless ban dragging.
Zones bad.
Buffer zone must also ban dragging.

Minimum Gauge/Carapace Size:

Gauge size good.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Nicole Bouchard, Rich Maney, Teri Frady.

Federal, state, and local government officials or their representatives:

Gail Kelly for U.S. Senator Snowe
Judy Cuddy for U.S. Senator Collins
Janet Dennis for U.S. Representative Baldacci
Henry Joy, Maine State Representative-District 141.
Royce Perkins, Maine State Representative-District 128.
Jill Golthwait, Maine State Senator.
Penn Estabrook, Acting Commissioner, Maine Dept. Of Marine Resources.
Herman Backman, Jr., Maine Dept. Of Marine Resources.
Terry Stockwell, Maine Dept. Of Marine Resources.

Both state and congressional representatives stressed the need for NMFS to listen

carefully to the public comments and remain open minded on future management plans. Flexibility in managing the lobster resource was strongly supported and area management was encouraged. Alternative #2-ISFMP was identified as the most effective, yet flexible method for joint, seamless state-Federal management of the resource.

Known Media Coverage:

TV Station(s):
One Bangor TV station
Portland's Fox TV affiliate.
Newspaper(s):
Mark Foote, LA Times.
Susan Jones, Commercial Fisheries News
Barbara Audet, The Weekly Padet, Penobscott Bay Press.
Steven Rapporit, The Ellsworth American.
Bangor Daily News
Bar Harbor Times
Fisherman's Voice

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 258
NUMBER SPEAKERS: 28

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

12 support 5 inch max size throughout range
7 question adequacy and accuracy of current statistical and biological data;
7 support for ISFMP-alternative #2;
6 Support a trap cap.
6 ban the non--trap harvest of lobsters;
4 support v-notch
4 Do not continue moratorium on new licenses.
4 Cut offshore effort only
4 go no lower than 800 traps
4 Management entire resource under a unified set of regulations
3 eliminate the buffer zone or ban all fishing in the zone by all gear types,
2 severe trap reductions in Federal waters would force effort inshore.
2 continue the moratorium on new licenses.

2 No limits/restrictions on number of traps.
2 Require owner/operator provision
1 No support for 4-Tier alternative#4 too low.
1 increase escape vent size
1 increase the carapace gauge size
1 Do not increase the carapace gauge size
1 Transfer management authority to the ACFCMA
1 Do not use nearshore/offshore fishing zones
1 No to mandatory reporting
1 High number of traps are like aquaculturing the resource; protection and food.

Known Media Coverage:

TV Station(s): 3 (NBC, ABC, CBS)
Chris Farbin and Myril Arge, WCSH-6.
Radio Station(s):
Andre deLer, Maine Public Radio.
Newspaper(s):
John Richardson, Portland Press.
Mary Brewer, Boothbay Register.
John Ewing, Portland Press Herald.
J. L. Amory, Freelance journalist, Portland.
Jerry Fraser, National Fisherman

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 129
NUMBER SPEAKERS: 26

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

13 question adequacy and accuracy of current statistical and biological data;
10 support for ISFMP-alternative #2;
9 continue the moratorium on new licenses.
7 ban the non--trap harvest of lobsters;
4 eliminate the buffer zone or ban all fishing in the zone by all gear types,
3 support v-notch
2 support 5 inch max size throughout range
2 severe trap reductions in Federal waters would force effort inshore.
2 Cut offshore effort only

2 go no lower than 800 traps
1 increase escape vent size
1 Support continued trap reduction
1 aggressively enforce current conservation measures,
2 increase the carapace gauge size

5. Machias, ME - May 1, 1998

Location: University of Maine-Machias, Reynolds Center Gym, 9 O'Brien Ave, Machias, ME.
Time: 3:00 p.m. - 5:45 p.m.
Weather: Sunny and warm.
Attendance: 139 - number of individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 26 individuals. Overall, several issues were repeatedly highlighted and the following is a brief description of the issues presented in general order of frequency of occurrence. The speakers expressed strong doubts about the adequacy and accuracy of current statistical and biological data on the resource, especially in Maine; voiced support for Alternative-2; supported a 5 inch maximum carapace size throughout the range of the resource; supported v-notch regulations; requested NMFS go no lower than 800 traps; requested NMFS support lobster hatcheries; supported a uniform trap limit; requested NMFS not increase the minimum gauge size; supported a ban of the non-trap harvest of lobsters; requested NMFS eliminate the buffer zone or ban all fishing in the zone by all gear types, not just traps; requested NMFS and the individual states aggressively enforce current conservation measures; requested NMFS require only owner/operators harvest lobster in the EEZ; supported an increase in the escape vent size; implement regulations similar to those currently in force in Maine. At least one speaker supported mandatory reporting; supported banning diving; not implementing trap tags; cutting offshore effort only; and questioned the validity of a larger trap allocation for the "offshore" fishery, support raising the minimum size and stated that severe trap reductions in Federal waters would force effort inshore to the detriment of the inshore fishery.

General Comments:

Industry needs joint Federal state cooperation for effective lobster management.
Return of groundfish may be bad for lobster.
Striped Bass and seal prefer to eat lobster and populations are on the rise.
Aquaculturing via traps works.
We are aquaculturing lobsters now with bait as food.
Use Maine Zone approach.
Final plan does not need to be specific, listen to fishermen.
Lobster is key to the Downeast economy.

Statistics/Data and Science/Biology:

Use the menu approach to conservation equivalent measures.
DEIS data comprised of assumptions, estimates, but little field data.
If cut traps, how will we land more?
Need better sea sampling.
Support mandatory reporting.
Support reporting, but make it simple.
Need tagging studies.
Logbook data inaccurate, forms too difficult to fill out.
Numbers are bad, landings are higher.
Offshore lobster stocks are not healthy.
Lobsters are scattered over Gulf of Maine, lots of 2-3 ½ lb lobsters out there. Lots of seed lobsters too.

Trap Alternatives:

Support Alternative #2, lesser of all evils.
Alternative#2 allows for local control.
Use ISFMP-Alt. #2 in final version.
Support a lobster hatchery.
Spawn and re-seed lobsters, need hatchery.

Trap Limits:

Support limits, good approach.
Need trap limit immediately.
Most alternatives are no good - Trap cuts are no good.
Don't regulate number of traps.
Go no lower than 800 traps.
Young fishermen need to be able to expand their fishery.

Trap Reductions:

Support trap reductions, but it needs to be substantial.
Cut offshore effort only.
Reduce effort offshore and protect the brood stock.
Traps for Area 3 too high - 800 is OK for offshore too.
Feds should implement a cap on the number of traps inshore and hold at 800 traps and see what happens.
Lobster hatchery better than trap restrictions.
If cut traps, lobsters will go hungry or eat each other.

License Moratorium:

Continue moratorium.
Shouldn't allow selling of permits.
Extend moratorium.
Support limited entry.

Non-Trap Alternatives:

Ban the non-trap fishery.
Ban draggers, bad on habitat.
Draggers mutilate lobsters.
Ban dragging.
Non trap landing lots of lobster illegally.

Maximum Size:

Implement a max. carapace size regulation immediately.
Support a max. size.
Oversize lobsters - Max size good.

Minimum Gauge/Carapace Size:

Implement a gauge increase.
Earlier gauge increase worked.
1/8 inch gauge increase better, rather than trap cuts.
No gauge increase is necessary.

Buffer Zone and Other Measures

Buffer Zone unacceptable
Use Maine v-notch rules everywhere.
Use the hatchery to seed lobsters.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Nicole Bouchard, Rich Maney, Teri Frady.

Federal, state, and local government officials or their representatives:

Judy Cuddy for U.S. Senator Collins
Matt Walker for U.S. Senator Snowe
Janet Dennis for U.S. Representative Baldacci.
Martha Bagley, Maine State Representative-District 133.
Jon Reisman, Selectman-Cooper, ME.
Penn Estabrook, Acting Commissioner, Maine Dept. Of Marine Resources.
Herman Backman, Jr., Maine Dept. Of Marine Resources

Both state and congressional representatives stressed the need for NMFS to listen carefully to the public comments and remain open minded on future management plans. Flexibility in managing the lobster resource was strongly supported and area management was encouraged. Alternative #2-ISFMP was identified as the most effective, yet flexible method for joint, seamless state-Federal management of the resource.

Known Media Coverage:

Newspaper(s):
Nancy Beal, Downeast Coastal Press.
Foye Terrell, Machias Valley News.

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 139
NUMBER SPEAKERS: 26

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

12 question adequacy and accuracy of current statistical and biological data;
6 support 5-inch max size throughout range
6 support for ISFMP-alternative #2;
6 support v-notch
6 go no lower than 800 traps
6 High number of traps are like aquaculturing the resource; protection and food.
5 Establish a lobster hatchery.
4 Support a trap cap.
3 Do not increase the carapace gauge size
2 ban the non--trap harvest of lobsters;
2 eliminate the buffer zone or ban all fishing in the zone by all gear types,
2 Enforce existing regulations better.
2 Require owner/operator provision
2 increase escape vent size
2 increase the carapace gauge size
2 Adopt Maine regulations throughout range of resource.
1 Support mandatory reporting
1 Ban diving for lobsters in the EEZ.
1 No support for trap tags.
1 Implement the same uniform trap cap for nearshore and offshore fishery.
1 Cut offshore effort only
1 Management entire resource under a unified set of regulations
1 severe trap reductions in Federal waters would force effort inshore.
1 No support for 4-Tier alternative#4 too low.

6. Portsmouth, NH - May 5, 1998

Location: **Urban Forestry Center, 35 Elwyn Road, Portsmouth, NH.**
Time: 3:00 p.m. - 4:45 p.m.
Weather: Rain showers and cool.
Attendance: 37 - number of individuals that filled out the sign-in sheet.

Introduction:

Harry Mears, Director, State, Federal, and Constituent Programs Office and Bob Ross, Fishery Management Specialist, State, Federal, and Constituent Programs Office provided the introductory remarks.

Overview:

Public comments were provided by 9 individuals. Overall, several issues were repeatedly highlighted and the following is a brief description of the issues presented in general order of frequency of occurrence. The speakers supported an overall cap on the number of

lobster traps; voiced support for Alternative #2; requested NMFS go no lower than 800 traps; supported a 5 inch maximum carapace size throughout the range of the resource; requested NMFS eliminate the buffer zone or ban all fishing in the zone by all gear types, not just traps; and supported an increase in the minimum legal carapace size. At least one speaker supported v-notch regulations; supported a ban of the non-trap harvest of lobsters; supported an increase in the escape vent size; supported the implementation of mandatory reporting; continuance of the license moratorium; support Alternative #5; and not implement Alternative #4.

General Comments:

Trap tags unclear in proposal.
The Commission and NMFS must get together and not compete.
With trip limits & closed areas, his only option is to do something else or go fishing only in winter.
The NMFS buyback program was an open door to escalate effort on lobsters.
The Feds have pushed gillnetters to enter the lobstering side of the fishery.
Need NMFS support for LCMTs.
Have NMFS work with LCMTs closely.
Need to define conservation equivalencies.

Trap Limits:

Trap limits are being looked at as the default measures.
I am currently fishing 1400 traps. I could live with 1200.
Decreasing to 800 is too drastic.
800 too low, big adjustment.
Effort cap with conservation equivalency good.

Trap Alternatives:

Do agree uniform measures are needed.
Commission plan gives flexibility to accomplish the task
NMFS doesn't provide a good conservation analysis of the Commission Plan. Four tier bad, forced to go lobstering.
I'm in favor of the Commission Plan if necessary in order to make it seamless, thus would be in favor of the default measures if assured they won't be implemented without proper evaluation of conservation procedures.
Support Alt. #2.
Support AOLA plan for Area 3.

Trap Reductions:

If you take traps out the fishery and bait out of water, present production will go down.
Fishermen will still catch the same number of lobsters despite lower trap numbers.
Most in the audience won't survive on 500 traps.

Maximum Size:

Put the 5" in everywhere.
A maximum gauge size is something that should be in the Plan.

Buffer Zone:

Does not like buffer zone. Does not

like 30-40 mile zone.
Restricting those presently to be the only ones to go offshore beyond 30 miles will make him wealthy.
Cannot tell people they are locked into 30 miles.
Buffer Zone bad: 10 miles banning just traps is wrong. 30 mile inshore zone is bad especially around Nantucket.
Locking into Zone is bad.
Close Buffer Zone to all gears.
Support Zone and with historical participation to determine which zone.

Gauge Increase:

Gauge increase is the easiest and best way to solve the problem.
If you go up on minimize size you save more lobsters as a broodstock.
Take Alt. #2 with gauge increase and certification of trap numbers.
Larger escape vent like a gauge increase is easier to enforce.

Non-Trap Alternatives:

30-40% of lobsters are culled and this is directly related to damage by trawling.
Trawling is not allowed in state waters.
Dragging more damage to lobster.
Dragging takes lots of traps.

Data and Science:

Science is way off. Egg-bearing lobsters on the bottom are phenomenal.
NMFS has to get out there to see what is happening. Seeing more legal size lobsters than ever before.
Sea sampling is way off.

License Moratorium:

Feds need to get a handle on the availability of permits.

Too many permits out and many were incidental. Can buy them.

Participating NMFS Staff:

Harry Mears, Bob Ross, Joyce Lacerda, Sue Olsen, and George Liles.

Known Federal, state, and local government officials or their representatives:

John Nelson, Fish & Game Dept., Concord, NH.
Bonnie Spinazzola for U.S. Senator Smith
Susan Arnold, Office of the Governor, Concord, NH.
Jeff Rose, Office of U.S. Representative Sununo, Manchester, NH.
G. Richie White, NH Fish and Game Commission.

John Nelson stressed the need for NMFS to evaluate the benefits of the management measures identified in ISFMP-Alt.#2. The resource is healthy and Alternative #2 addressed the concerns raised in N.H. Flexibility in managing the lobster resource was strongly supported by New Hampshire lobstermen and Alternative #2 was identified as the most effect, yet flexible method for joint, seamless state-Federal management of the resource. In addition, there is a need for uniform management measures throughout the range of the species.

Known Media Coverage:

TV Station(s): 1
Kelly Bates, Channel 9.

Newspaper(s)
Susan Maddocks, Portsmouth Harold

The meeting was tape recorded, 1 cassette tape.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 37
NUMBER SPEAKERS: 9

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

5 Support a trap cap.
4 support for ISFMP-alternative #2;
4 go no lower than 800 traps
2 support 5 inch max size throughout range

2 eliminate the buffer zone or ban all fishing in the zone by all gear types,
2 increase the carapace gauge size
2 Do not support Fishing Zones
1 Support Fishing Zones
1 support v-notch
1 ban the non--trap harvest of lobsters;
1 increase escape vent size
1 Support mandatory reporting
1 Management entire resource under a unified set of regulations
1 No support for 4-Tier alternative #4 = 400&800 and 1000&2000, too low.
1 Continue License Moratorium
1 Support Alt. #5 = Historic offshore/800 nearshore
1 question adequacy and accuracy of current statistical and biological data;

7. Narragansett, RI - May 6, 1998

Location: **Narragansett Town Hall Assembly Room, 25 Fifth Street, Narragansett, RI.**
Time: 3:00 p.m. - 5:15 p.m.
Weather: Rainy and cool.
Attendance: 89 - individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 23 individuals. Several industry management proposals were introduced. The Buzzards Bay Plan, Westport Plan and Sakonnet Point Plan included variations of the following: in 1999, a gauge increase of 1/32 inch and a trap cap of 1000 traps; in 2000, a gauge increase of 1/32 inch, along with trap reductions to 800 traps and a stock assessment; in 2001 an assessment and further gauge increases if determined to be necessary by the assessment; in 2002 a gauge increase of 1/32 inch and an increase in the escape vent to 2 inches; and in 2003 a gauge increase of 1/32 inch, bringing the carapace size to 3-3/8 inches. Other proposals from the Atlantic Offshore Lobstermen's Association included a gauge increase to 3-3/8 inches over 5 years similar to the increase described above, trap reductions implemented on a sliding scale, varying from 0-50% depending on the amount of gear fished where larger operators are cut more aggressively and which would be determined by use of certified historic participation in the Area 3 fishery. Of the six trap alternatives identified in the DEIS, Alternative-2 received the most support, while historic participation, in both the inshore and offshore area, was also supported by many participants. Support for a gauge increase appeared to receive overwhelming support from the public. Recent disclosure of Canadian measures to raise the gauge size in several Canadian Lobster Harvesting Zones was viewed as a positive step towards joint cooperation. Non-intrusive measures such as v-notching,

maximum carapace size, and escape vent size increases were preferred over trap limits. The buffer zone was only acceptable if an industry version of the earlier Commission-planned "Overlap Area" for Area 2/3 or EMT proposed line were used. The Federal zones were not favorably received by the participants.

General Comments:

Want LCMT input to NMFS plan.
Support history based plan from AOLA.
Higher compliance if plan comes from fishermen.
Federal regs will create excess pressure on inshore areas.
Support LCMT process.
NMFS does not trust the Commission to follow through with plan.
We need lobster management.
NMFS is moving too fast.
Lobstering is not territorial in R.I. like it is in Maine and Mass.
Need measures to determine conservation equivalencies.
Striped bass population disrupting ecology.
Fishermen are aquaculturing with bait and traps.

Trap Alternatives:

Latent effort not a problem, most won't go up because they like the number they're working and won't increase.
Use historic participation Alt. #5.
The AOLA Plan proposes a gauge increase going to 3-3/8" in year 2003.
Support AOLA proposal = 1999 raise gauge 1/32" and cap traps at 1000 traps; In 2000 raise gauge another 1/32" and cut traps to 800 traps; 2001 no new measures; 2002 raise gauge 1/32" and implement a 2" escape vent size; in 2003 raise gauge 1/32".
Adaptive management best.
What is equivalent to trap reductions?
Support Alt. #2.
Support Alt. #2, best route to go.
Alt. #4 - doesn't halt possible shift in effort towards offshore.
Alt.#5 - doesn't take into account areas fished.
Support history based plan.
Alt. #2 is best.
Do something today.
Time frame for NMFS too fast.
NMFS = sledge hammer approach vs Commission = gentler approach.
RILA supports Alt. #2, allows fishermen to participate bottom up, rather than top down.

Minimum Gauge/Carapace Size:

Support gauge increases.
Gauge increase good if it coincides with Canada.
Increase gauge in increments of 1/32" so by 2003 go up to 3-3/8" along with a 2" escape vent.
Gauge increase.
Support gauge increase. Support no spearing.
Gauge increase logical, fair and equitable.
Favors gauge increase 3 3/8 over 5 years.
Support gauge with least amount of restrictions.
Vast majority supported gauge increase and escape vent.

Escape Vents/ 5" Maximum Size:

Maximum size good throughout range.
Maximum trap size OK.
Support biological method gauge/vent increase, maximum size, etc. rather than mechanics of business.
V-notching good.
Support V-notch.
Support 2 inch escape vent.

Trap Limits:

Lots of inshore fishermen fish 12-1400 traps.
Need more liberal trap cap.
Consider non-trap management tools.
Consider part vs. full-time lobstermen.
Don't pick trap #s out of thin air.
Listen to fishermen.
One side fits all, not fair.
No one should be allowed to increase effort.
Larger scale operation that's efficient is being penalized.
Vessels travel large distances to fish in this area, not like up north.
Need to cap effort.
Want trap tags to be transferable.

Trap Reductions:

No lobsters within 3 miles around RI and 800 traps is too low.
Support a cap and put in pause between decreases.
More biological approach better than reducing traps.
Trap limits: too much, too fast.
DEIS proposals would force people in to Area 3 (offshore).

Buffer Zone/Area Management:

No buffer zone needed, large number of people fish that zone.
Zone locking in is bad.
Close buffer zone to mobile gear.
Opposed buffer zone. Overlap area identified in Commission plan between Zone 2 and 3 is good.
No to one area only.
No to fishery zones.
Zones crazy, most fish all three in this area.
Buffer zone - use NEFMC #5 line.
For zones, lock in bad. Create the "Gray Area between Zone 2 + 3 as in Commission plan or look at EMT process for Area 2.Buffer Zone without Gray Area is no good.
Prefer ISFMP zones to DEIS zones.
If forced to choose one zone, everyone will choose Zone C because trap allocation is larger even if vessel is not appropriate for offshore fishery.

Non-Trap Alternatives:

100 lobsters/day not fair to draggers.
Support ban on spearing.

Data Collection:

DEIS doesn't use best available scientific information.
Scientific data being developed, wait for better data.
Questions science - no evaluation period to review effects.
Support tagging program.
Support mandatory reporting.
We need observers now and can't get them.
Need assessment of plan measures in 2000 and 2001 and re-evaluate then.
We are aquaculturing lobsters.
User fees could be charged to support data collection.

License Moratorium:
Support moratorium.

Participating NMFS Staff:
Harry Mears, Kevin Chu, Bob Ross, Dierdre Kimball and George Liles.

Other NMFS Officials Attending:
Walter Anoushian

Federal, state, and local government officials or their representatives:
David Borden, RI Dept. Env. Management, Div. Of Fish and Wildlife.
Scott Olszewski, RI DEM, Div. Of Fish and Wildlife.
April Valerie, RI DEM, Div. Of Fish and Wildlife.
Thomas Angell, RI DEM, Fish and Wildlife, Wakefield, RI.

Known Media Coverage:
Newspaper(s) -
James Murdock, Narragansett Times, Wakefield, RI

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 89
NUMBER SPEAKERS: 23

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

6 Support for trap alternative: ISFMP-alternative #2;
5 Increase the carapace gauge size
3 Do not increase the carapace gauge size
5 Increase escape vent size
4 Allow to fish in more than one zone or eliminate the Federal Zones.
4 Eliminate the buffer zone or ban all fishing in the zone by all gear types,
2 If implement buffer zone, use ISFMP Overlap for Area 2-3.
3 Support a Trap Cap
2 Do not support a trap cap.
3 Do not support continued trap reduction
1 Support continued trap reduction
1 Support mandatory reporting
2 Support 5 inch maximum carapace size
1 Do not support Non-trap alternative#1

1 Do not support non-trap alternative#2
1 Continue the moratorium on new licenses.
1 Ban the non--trap harvest of lobsters;
2 Scientific data is outdated, use newest information.
1 Support for trap alternative: alternative #4;
1 Do not support for trap alternative: alternative #4;
2 Support for trap alternative: alternative #5;
1 Do not support for trap alternative: alternative #5;
1 Support trap tags.
1 Support Area management
1 Support v-notching
1 Ban spearing of lobsters

8. Milford, CT - May 7, 1998

Location: Howard Johnson Hotel, Dickens Room, 1052 Boston Post Road, Milford, CT.
Time: 3:00 p.m. - 5:00 p.m.
Weather: Overcast and mild.
Attendance: 12 - individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 5 individuals. Support for a gauge increase appeared to receive the most support from the public, especially if implemented in place of continued trap reductions. In addition to support for a gauge increase, increasing the size of the escape vents was favored by most participants. The accuracy of the scientific data and population models used to determine the status of the lobster stock in Long Island Sound was repeatedly questioned. Industry reported sub-legal lobsters are common, but it was rare to see lobsters over 2 pounds. The industry felt that the high number of traps currently being fished was providing food and refuge for the juveniles and trap reductions would be detrimental to this process. Of the six trap alternatives identified in the DEIS, Alternative-2 received the most support, while there was no discussion of the non-trap alternatives. Support was also voiced for continuing the Federal moratorium on new licenses and implementing mandatory reporting and a trap tag program. No one spoke in support of the buffer zone concept.

General Comments:

Timing for Federal regs is a problem. Federal Plan needs heavy industry input. Area 3 LCMT's will have input by July and other LCMT's will have input by October. Why can't we wait till October?
Industry doesn't need any more laws.

Makes more sense for states to regulate lobsters.
Farmers paid not to plant, why not pay lobstermen not to fish?
Feeding and releasing shorts and eggers is the safest method possible.
His bank won't cut his vessel mortgage down over five years like NMFS is proposing to make trap cuts over 5 years to rebuild lobster.
Why don't we subsidize lobstermen, like farmers.
We're feeding lobsters here and aquaculture is working.
Half of groundfish vessel buyouts bought lobster vessels.
Can't compare groundfish to lobster, we throw eggers and shorts back alive.

We should use the EMT plan, it was workable.
Expect a quota system eventually.

Trap Alternatives:

Support Alt. #2.
Alt. #2 is an industry plan.
DEIS is a hacked up plan.
Plan not worth paper its written on.
Support Alt. #2 - lets run with something that will work.
We need to spend lots of time with EMT plan and generate group support.

No problem with lobsters in Long Island Sound.

Trap Reductions:

Fishes 1200-1600 traps. How are you going to enforce a 50% reduction.
All these trap plans are based on reductions, yet there is no way of knowing if trap reduction will effect overfishing.
Proposed trap reductions just don't jive, he fishes 2300 pots.
Numbers would only work for part-timers.
Tons of sub-legal eggers.
Trap limit is crazy. We have size distribution from 1 lb, 1-1/4 and 1 ½ pounders.
Never seen so many lobsters, why cut traps?
Decreasing traps would increase cannibalism.

Minimum Gauge/Carapace Size:

Easiest is a gauge increase.
Gauge increase much more orderly.
Earlier gauge increase/vent increase did the job. Average lobster is 1 1/4 lbs.
Rather see a gauge increase. Go up a 1/32" gauge increase.
No need for a maximum size.
No need for a gauge increase.

Statistics and Data:

Current landing figures are wrong.
Scientific community is speculating, data is bad.
80% are mature by the time they reach minimum legal size.
Many more lobster now than in the 1950's.
Question 10% as an overfishing definition.
CT logbooks are accurate and enforced.
Fed's are not using best available science. Here on LIS, lobsters are sexually mature by age 3-4.
There is ongoing controversy over LIS model. In Federal Egg model the

intermolt period used 7 years and in LIS that makes F = 1.4-1.6 while state data used 4 years and F dropped to O.5.

This is very serious business, so use best available science.

Connecticut logbook best.

EMT did provide tagging program proposal and its a good idea.

Lobster model has flaw. State has submitted better science to NMFS.

Need trap surveys, not trawl surveys.

License Moratorium:

If continue moratorium beyond 2003 use a lottery or pool.

Continue moratorium.

CT has license moratorium and he can't sell his license but he agrees with the moratorium.

Trap Tags:

As for traptags - we need to fish traps in both state and Federal waters.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Chris Mantzaris

Other NMFS Officials Attending:

Dr. Tony Calabrese, Milford, CT.

Federal, state, and local government officials or their representatives:

Ernest Beckwith, Jr., Director of Fisheries, CT Dept. Of Env. Protection, Hartford, CT.

Known Media Coverage:

None

Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 12
NUMBER SPEAKERS: 5

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

4 Increase the carapace gauge size
3 The science is not the best available for this area.
2 Increase the escape vent size

2 Support for trap alternative: ISFMP-alternative #2;
1 Support mandatory reporting
2 Continue the moratorium on new licenses.
1 Go no lower than 800 traps
1 Trap reductions are unnecessary.

9. Tom's River, NJ - May 8, 1998

Location: Quality Inn of Tom's River, 815 Route 37 West, Tom's River, NJ.
Time: 1:00 p.m. - 3:15 p.m.
Weather: Heavy Rain and cool.
Attendance: 30 - individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 16 individuals. Environmental concerns, especially the impact on the habitat by scallop gear was cited as a major issue. The few areas of raised ground and favorable lobster habitat were reportedly being negatively impacted by increased fishing effort by both the local and out of state scallop fleets. Due to the scattered availability of lobster, most fishermen fished large numbers of traps over large areas and did not support trap limits. Support centered on non-trap management tools and the gauge increase was the most frequently supported approach. In addition to a gauge increase, most participants voiced support for an escape vent increase while a maximum size regulation received mixed support. The Buffer Zone concept was not supported and the industry opposed the Federal zone lock in requirement. The recreational diver industry was concerned about vessel trip limits, individual bag limits and the maximum carapace size limit. There was general consensus that the resource south of Long Island Sound was not scientifically monitored and there was a need for better local science.

General Comments:

New Jersey fishery is different from North to South. North, similar to LI Sound terrain. South has different bottom associated with sea bass, that's why Commission divided NJ coast into Area 4 + 5 and expect different regulations from N to S. South pot limit would affect sea bass fishery.
With regulations concerned about son's ability to make a go in this industry.
Traps are the most environmentally friendly gear.
Ghost gillnet gear is a problem and still catches lobster.
There are only ~40 pot fishermen in NJ.

Essential Fish Habitat:

Biggest issue here is habitat destruction from scallopers.
Essential Fish habitat should be evaluated.
Habitat is being leveled by mobile gear and its effecting lobster fishery.
Scallopers destroying habitat and closures to North has already pushed effort south.
Scallopers ruining bottom.
Scallopers are the problem here, work on their gear damage.
Habitat is a big issue, still losing the little hard bottom habitat that's available.
There was chemical dumping after WWI + WWII & huge amounts are 300 miles off tip of NJ and starting to decay now. A major environmental problem may begin.

Trap Alternatives:

Support Alt. #2.
No to Alt. #4.
Agree with Alt. #2.

Trap Reductions:

Trap limits will result in increased effort because NJ has 150 permits, but now only 40-50 actually fish.
Maine is a different fishery, sociology different and very territorial.
Pot limits - will force fishermen to go under or start cheating.
Pot limit enforcement extremely difficult and won't protect resource.
No solution to trap limit problem.
Need other techniques.
No to trap limit, currently fishes about 1500 pots.
Can't live on lower trap limits due to the scattered nature of lobsters in this area.
Against trap limits down here, lobsters spread out and need to fish more traps.

No trap limits, fishery his is not like Maine, with cut to 480 traps here and we can't make a living.
Can live with 1200 traps.
No support to the trap limits, fishery here requires more pots over a broader area.
Cut traps to 1200 and see what happens.

Conservation Equivalent Measures:

Find another method rather than trap reductions.
No to maximum size.
Support LCMT approach.
Request NMFS technical support for LCMTs.
Yes to vent increase.
Support a gauge increase and vent increase as a better measure than trap reductions.
A good measure would be to leave softshell lobsters in water - ones that can't hold the claw band.
Ban harvest in Jan & Feb each year to let lobsters rest.
Support maximum size especially inshore.
V-notch good.
Max. size reg. will hurt offshore boats.
Follow advice of LCMT's; otherwise will lose fishermens allegiance.

Non Trap Alternatives:

Represents 53 dive vessels; 100/day lobster limit is a concern.
Non-trap: 100/day and 500 maximum is OK, but prefer 50/day & 100/trip.
Allow no directed fishery other than traps.
Support no spearing.
Support limit of six lobsters for recreational fishery.
Support no spearing. NJ has a regulation like that.
Questions effectiveness of max. size because divers like large "trophy" size lobsters. Support area management.
For non-trap Alt.#3 doesn't support ban on lobster, no justification and will effect $50 million recreational fishery.
Non-trap: Alt. #1 treats recreational fishery like commercial fishery.
If rec. boats limited to six per person, we do not need boat limit.
Some dive boats make several trips a day so prefer non-trap Alt. #2.
Maximum size would hurt here.

Minimum Gauge/Carapace Size:

Implement a gauge size increase, or even have different gauge size requirements from north to south. NJ has variable gauge sizes within the state and can enforce on landing.
Likes gauge and vent increase.
Divers support a min. gauge increase of 1/4".
Dive clubs want gradual increase in gauge size.
Yes to gauge increase.
One dive club members have voluntarily raised their minimum gauge to 3-1/2".

Science/Statistics and Data:

Request NMFS provide analytical support off NJ. There is little scientific lobster information south of LI Sound.
No to mandatory reporting requirements.
Divers will offer to support research and offer to support locating lost traps.

Recreational fishery should not have mandatory reporting requirement.

License Moratorium:

Favors license moratorium.
Support a moratorium on new entrants.

Buffer Zone/Zone Management:

Three Federal zones make no sense because a fishery exists in the 30-40 mile zone and closure would have no conservation benefit.
Fishes about 25% of his business in buffer zone and opposes it.
Against NMFS zone lock-ins.
No to buffer zone, fishes all three zones and its not fair.
Does not favor the Federal zones.
No support for buffer zone or zone lock in proposal.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Kathy Corbo, Joanne Schifano.

Federal, state, and local government officials or their representatives:

Bruce Freeman, N.J. Div. Fish and Game, Trenton, NJ.
Bill Andrews, NJ DEP, Marine Fisheries**.**

Known Media Coverage:

None Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 30
NUMBER SPEAKERS: 16

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

8 Habitat destruction is a major problem
6 Increase the carapace gauge size
6 Trap reductions are unnecessary.
4 No support for Buffer Zone
4 No support for locking in to the 3 Federal Zones
3 Continue the moratorium on new licenses.
3 Go no lower than 1200 traps
3 Increase the escape vent size
2 Support for trap alternative: ISFMP-alternative #2;
2 NMFS should support LCMT's
2 The science is not the best available for this area.
2 Support Non-Trap Alt.#2 = 500/trip
2 Support ban on spearing
2 No support for a max. carapace size
1 No support for mandatory reporting
1 support for a max carapace size.
1 Support for v-notching
1 No support for Non-trap Alt.#3 = ban**.**

10. Buzzards Bay, MA - May 11, 1998

Location: Massachusetts Maritime Academy, Admirals Hall, 101 Academy Dr., Buzzards

Bay, MA.
Time: 6:00 p.m. - 7:55 p.m.
Weather: Rainy and cool.
Attendance: 101 - individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 24 individuals. The gauge increase was the most frequently supported approach to lobster management. In addition to the gauge increase, often a trap cap, and continued trap reductions were cited as necessary measures. Industry participants presented several group proposals at the meeting in place of the identified alternatives in the DEIS. The Buzzards Bay Plan, Westport Plan and Sakonnet Point Plan included variations of the following: in 1999, a gauge increase of 1/32 inch and a trap cap of 1000 traps; in 2000, a gauge increase of 1/32 inch, along with trap reductions to 800 traps and a stock assessment; in 2001 an assessment and further gauge increases if determined to be necessary by the assessment; in 2002 a gauge increase of 1/32 inch and an increase in the escape vent to 2 inches; and in 2003 a gauge increase of 1/32 inch, bringing the carapace size to 3-3/8 inches. Other proposals from the Atlantic Offshore Lobstermen's Association included a gauge increase to 3-3/8 inches over 5 years similar to the increase described above, trap reductions implemented on a sliding scale, varying from 0-50% depending on the amount of gear fished where larger operators are cut more aggressively and which would be determined by use of certified historic participation in the Area 3 fishery. The Buffer Zone received no support but if implemented, the Overlap Area between Area 2 and 3 should be used in place of the 30-40 mile option. There was support for continuation of the license moratorium in Federal waters, and support for mandatory reporting. For existing alternatives, Alternative #2 received the most support while Alternative #4, the Four Tier option, received no support. Of the non-trap alternatives, the current regulations, 100/day up to 500/trip was favored while Alternative #2 received the least support.

General Comments:

Basically support NMFS, lobsters are overfished.
Support for developing single plan - that's why they're here.
NMFS should look at Commission's implementation dates, the LCMTs will have information and NMFS should incorporate info into the Federal plan.
OCLMA wants to develop its own plan.
Commission's plan is not enough.
Give Commission a chance, NMFS is holding up implementation of Commission plan.

Trap Alternatives:

Support Alt. #2=ISFMP and suggest NMFS sign on to that.
Alt. #2 doesn't do much; no trap limits - prescription for disaster, if continues.

Oppose Alt. #3= 800/2000 traps.

Supports Buzzards Bay Plan: In 1999 cap at 1000 traps, and increase gauge 1/32". In 2000 cut to 800 traps, increase gauge by 1/32" and assess stock status. In 2002 increase gauge by 1/32" and raise escape vent to 2". In 2003 increase gauge by 1/32" up to 3-3/8"

Buzzards Bay Plan is best.

No option goes far enough in cutting traps.

DEIS does not clearly define historic participation. Support historic approach.

Support AOLA Plan for Area 3. Their plan hinges on historic participation. Increase minimum gauge to 3 3/8" over 5 years. Trap reduction on a sliding scale about 25% over 8 years.

Support AOLA plan for offshore.

Support Alt. #2.

Alt. #4=400/800 & 1000/2000 traps will make bunch of liars out of lobstermen. No basis for historic data because there is no mandatory reporting.

Trap Alt. #2 plan will work, feds muddying water.

Feel Alt. #2 did have time - certain deliverables by LCMTs.

Alt. #4 Tier System too complex, and with no mandatory reporting the historic approach places MA lobstermen at risk, since MA does have data and other states don't. Will create conflicts with fishermen. Alt. #5 will create conflicts too

NMFS plan hasn't proven trap reductions will accomplish goal.

NMFS is holding up progress and continues to stall their section of Commission plan.

DEIS does not go far enough to prevent increases in traps. Could allow an inactive permit to be activated.

Trap Reductions:

Support trap limits. Make sure measures apply to specific areas and are not universal to all areas.

Concern about trap increase for part timers. Use three year average for historic trap participation.

Supports trap reductions, they are necessary.

Concerned about people increasing traps. Trap Limits - Alt. #3 no good, no proof that trap reduction will end overfishing.

Trap limit - by time NMFS implements, Commission plan will be @ 800.

Default trap reductions are OK to encourage the LCMT's to make timely recommendations.

It's frequency of trap hauls, not number of traps that matter.

Support trap reductions bu stop at 800.

Ban the 10 pot lobster license.

Conservation Equivalent Measures:

LCMTs should be used to propose conservation measures.

Leave it to LCMTs.

Max. Size no good because Outer Cape fishery catches large offshore lobster in near shore waters
No to v-notch - doesn't solve overfishing and OCCLA averages 35% eggers and it will hurt us
No to maximum size - doesn't solve overfishing problems.
No to V-notch: see the Long Island Sound study on bacteria killing wounded lobsters and v-notched eggers don't molt for 2 years so v-notching may be fatal.
V-notch doesn't agree with National Standards, because v-notching isn't the best science.

Non Trap Alternatives:

Non-Trap alternative. Supports Alt. #3= ban, but he is realistic. Alt. #1=100/day & 500/trip is only acceptable way to go. Alt. #2=500/trip will upset current regs in place.
Support Alt. #2 for non-trap.
Non-trap Alt. #1 best, it is in place in state and Federal waters now. Oppose Alt. #2 - allow for increase in effort

Minimum Gauge/Carapace Size:

Support gauge increase.
Support a gauge increase, its the easiest to enforce.
Encouraged by recent developments in Canada to increase their gauge size.
Concerned that Canadians aren't all going up to 3 3/8".
Supports gauge increase as best approach.
Support gauge increase as most effective.
Support gauge increase and glad other areas now following OCCLA proposed limits down to 400.
Gauge increase is fair for all.
Gauge increase is good, but no to v-notch and max. Size regulations.
Support effort cap and gauge increase.
Support gauge increases proposed by Area 2 towns.
# of egg bearing lobsters has increased, but they are smaller.
Outer Cape is unique, we catch mostly large lobsters.

Science/Statistics and Data:

Support mandatory reporting - daily reports not viable though, use form similar to MA annual or bi-annual

License Moratorium:

Support Moratorium
Continue the license moratorium.
Without moratorium, effort will increase.

Buffer Zone/Zone Management:

Oppose Buffer Zone. Concept only in Area 1. DEIS talks about lobster safe haven and undisturbed habitat ridiculous, traps don't disturb habitat and buffer zone will fall apart if non-trap gear allowed.
Area 2 Buffer Zone: should use the ISFMP's "Gray Area" - no separation between inshore and offshore in this area, and the gray area resolved conflict.

Buffer Zone is unworkable - takes lots of productive ground away.
Don't like Buffer Zone as written.
Want Area 2 boundary changed to Gray Area.
No fish zone - opposed to changing boundary lines. Zone line - use EMT lines instead.
Fishes Zone 3 - supports zone approach.
A lot of mud in water with Zones A/B/C - confusing - don't need to fish Zone B all way to NC.
Buffer Zone - creating trawl zone no good.
Permits - can't see zones for permits.
DEIS Zone concept not necessary and confusing.
Use ISFMP zones instead of DEIS proposed zones.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Ken Beal, Teri Frady.

Federal, state, and local government officials or their representatives:

Jim Fair, Massachusetts Division of Marine Fisheries, Boston, MA.
Bruce Estrella, Massachusetts Division of Marine Fisheries, Pocasset, MA
David Borden, RI Dept. Env. Management, Div. Of Fish and Wildlife.

Known Media Coverage:

None
Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 101
NUMBER SPEAKERS: 24

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

15 Increase the carapace gauge size
14 Support Trap Cap.
10 No support for Buffer Zone
9 Support for trap alternative: ISFMP-alternative #2;
7 Support continued trap reductions after cap.
6 Increase the escape vent size

4 Concern about latent effort.
4 Continue the moratorium on new licenses.
3 No support for locking in to the 3 Federal Zones
4 No support for ISFMP-alternative #2
3 No support for Alt. 3 = 800/2000
4 No support for alternative #4 = 4 Tier
4 Support Historic trap allocation offshore = Alt.5.
3 No support for Alt. 5 = 800/historic
4 Support Non-trap Alt. 1
2 Support Non-Trap Alt.#2 = 500/trip
3 No support for Non-Trap Alt. 2.
2 Support Non-trap Alt.3 = Ban dragging.
4 No support for Non-trap Alt.3 = Ban Dragging.
4 No support for a max. carapace size
3 Support for mandatory reporting
4 No support for v-notching
3 Use ISFMP's Gray Area for Buffer between Area 2 & 3.

11. Riverhead, NY - May 14, 1998

Location: Ramada Inn, Exit 72, Long Island Expressway and Route 25, Riverhead, NY.
Time: 3:00 p.m. - 5:25 p.m.
Weather: Sunny and warm.
Attendance: 35 - individuals that filled out the sign-in sheet.

Overview:

Public comments were provided by 9 individuals. The participants felt the resource was not overfished, and questioned the accuracy of the scientific data. There was no support for either a cap on the number of traps in the water or any need for reduction in effort at this time. There was concern that continued trap reductions would force effort inshore and/or drive participants out of business. If management measures were needed, non-trap alternatives such as a carapace size increase, and an increase in the escape vent size were preferred. Most participants did not fish in Federal waters, but felt that Federal regulations would eventually effect state water permit holders. There was support for better data collection, while v-notching and the maximum size received mixed support.

General Comments:

Government did a groundfish buyout, lobstermen could use money too.

Don't see need to change anything. 1/3 of traps are filled with eggers. The more vessels, the better the

landings, because we're feeding lobster with a tremendous amount of food.

By necessity, effort will drop when catch drops.

Even if the plan now applies only to Federal permit holders, in long run a Federal plan will effect state waters.

Lobster regs will affect the black sea bass/lobster fishery in Area 4.

Possibly close an area in early summer.

Non-cooperation by feds and Commission, causing stress. Feds need to work with Commission.

Why no buyback for all those surplus traps? Cost him $150,000 for his gear, government should buy it back.

Everyone is concerned what the feds do will trickle down to state waters.

Lots of inactive Federal licenses and once full-timers are cut, then others will jump in.

Traps should be transferable - buy/sell, but not lease to avoid wealthy outside investors.

Concern about hypoxia in LIS.

Trap Alternatives:

Support Alt. #2..

Support Alt. #2. Good starting point for a level playing field.

Support only Alt. #2.

Start with historic trap effort.

Minimum Gauge/Carapace Size:

Past gauge increase was a positive.

Support a gauge increase, another 1/8" more and everyone will realize more lbs; 1/32" not a noticeable increase.

Support gauge increase in Area 4, but make it area specific.

Escape Vents/ 5" Maximum Size:

According to DEIS on p21 vent regulations have minimal effect, but according to NMFS scientists, a 2" vent = 20% improvement.

Suggest a variable vent size, larger for northern areas rather than gauge increase.

Area 4 - maximum size would hurt because lots of large lobsters, but if necessary have it apply only on females.

V-notch wouldn't help unless Area 3 doing it, because lots of migration.

V-notch bad, we have red tail disease.

V-notch not required, but it's easy to enforce.

Prefer vent increase to gauge increase.

Trap Limits:

May result in Federal permit holders buying two vessels, one for Federal waters and one for state waters.

If NMFS imposes trap tags, we should be able to buy and sell them.

Trap Reductions:

Fear the 480 trap number and its ripple effect on boat builders, etc.

Yes to trap tags.

Trap reduction to 480 will effect families.

How can feds enforce trap reductions?

A 480 pot limit will put stern men out of business.

Trap reductions offshore will drive effort inshore.

480 traps would force all traps inshore to state waters.

Cap effort in Area 4 and only reduce if necessary.

Non-Trap Alternatives:

Trawlerman - favors Alt. #2 - 500 lobsters. Only get 500 for a few days a year when they're moving.
Rec. divers want to keep 6 lobsters a day.
Why can feds tell a permit holder what type of gear he can fish, trawls vs. pots.

Science and Data Collection:

NMFS data and definition of overfishing is flawed.
Voluntary information on trap bogus, industry is fishing much less gear.
Yes to tagging and mandatory reporting. Yes to U.S./Canadian coordination
Need better science, what about lack of oxygen in W. LIS.
Questions overfishing definition, especially 10% egg
Scuba diver - lots of lobsters on the bottom.
Work with divers for better data.Area 4 not overfished.
Need observers on boats.
Seeing lots of small sub-legal eggers.
1/3rd of shorts are eggers.
We are feeding lobsters.

License Moratorium:

Yes to extend moratorium.

Other:

Could have temporary Area 4 closures.
Effort in Area 4 is so low that it is effectively a lobster sanctuary.
Limit Area 4 participation to historical participants.
Should not allow a person to lease a lobster license.

Participating NMFS Staff:

Harry Mears, Kevin Chu, Bob Ross, Susan Olsen.

Other NMFS Officials Attending:

Erik Braun, David McKernan.

Federal, state, and local government officials or their representatives:

Karen Graulich, NY DEC, Div. Of Marine Fisheries.
Carl LoBue, NY DEC, Div. Of Marine Fisheries.
Philip T. Briggs, NY DEC, Div. Of Marine Fisheries, retired.

Known Media Coverage:

None
Meeting was tape recorded, 2 cassette tapes.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 35
NUMBER SPEAKERS: 9

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

5	Scientific data is outdated, use newest information.
5	Do not support a trap cap.
4	Do not support continued trap reduction
3	Support for trap alternative: ISFMP-alternative #2;
3	Increase the carapace gauge size
1	Increase escape vent size
2	Support mandatory reporting
2	Support 5 inch maximum carapace size
1	No support for 5" max. Size.
1	Continue the moratorium on new licenses.
1	Support trap tags.
2	Support v-notching
1	No support for v-notching
2	Support Federal buyback program
1	allow traps to be transferable
1	lobster regs will effect black sea bass fishery.

12. Manteo, NC - May 18, 1998

Location: North Carolina Aquarium on Roanoke Island, Airport Road, Manteo, NC.
Time: 5:00 p.m. - 6:00 p.m.
Weather: Warm and sunny.

Attendance: 3 - number of individuals that filled out the sign-in sheet.

Introduction:

Bob Ross, Fishery Management Specialist, State, Federal, and Constituent Programs Office and John Merriner, Research Fishery Biologist provided the introductory remarks.

Overview:

Public comments were provided by 1 individual. He expressed concern that NMFS is not looking at an ecosystem approach to the science, and the correlation of egg production to stock size is not the best measure to use. Due to warmer waters, lobsters mature faster and population fluctuations may be due to predation, environmental, or population shifts. Since non-trap gear is restricted, to be fair the same limits should apply to the trap sector. He did not support trap tag requirements, and felt a landing limit on the non-trap sector would lead to highgrading.

Participating NMFS Staff:

Bob Ross, John Merriner.

Known Federal, state, and local government officials or their representatives:

Fentress (Red) Munden, N.C. Div. Marine Fisheries, Morehead City, N.C.

Known Media Coverage:

None

The meeting was tape recorded, 1 cassette tape.

13. Ocean City, MD - May 19, 1998

Location: Sheraton Fontainebleau Hotel, 10100 Coastal Highway, Ocean City, MD.
Time: 5:00 p.m. - 6:15 p.m.
Weather: Warm and sunny.
Attendance: 9 - number of individuals that filled out the sign-in sheet.

Introduction:

Bob Ross, Fishery Management Specialist, State, Federal, and Constituent Programs Office and Tom Meyer, Intergovernmental and Recreational Fisheries provided the introductory remarks.

Overview:

Public comments were provided by 6 individuals. The major concern was the possible impact of lobster regulations on the black sea bass pot fishery. Most participants viewed lobster primarily as a bycatch to the black sea bass fishery rather than as a directed fishery. Participants in Maryland had recently been financially impacted by a new 10 inch minimum sea bass size limit and felt trap reductions would drastically impact them. Participants felt a carapace size increase would be preferred over continued trap reductions, but opposed the maximum size limit as well as the trap tag proposals. Lobsters are most abundant from June-October in the nearshore area from 10-25 miles from shore.

General Comments:

Gear conflict with scallop fishery is a problem now.
We see most lobsters from June - October.
Only a few directed vessels fish lobsters in deep water canyons from 50-70 miles offshore.
Most fishermen fish from 10-25 miles from shore for black sea bass.
There is no state water fishery here.
bass - for sea bass we fish within 25 miles of shore.
Trap cuts could drastically effect sea bass fishery.
Request lobsters caught by sea bass gear be excluded.
Allow by-catch without sea bass pots limit.
New 10" black sea bass gear regulation has already financially impacted pot fishermen.

Trap Limits:

Support trap limits and size increase.
Primarily fishes sea bass but lobsters average 50-100 lbs/day - rules implemented for lobsters effect sea

Trap Tags:

A trap tag system is a problem with black sea bass pots.

Maximum Size:

Maximum size no good, we get a lot of large lobsters.

Buffer Zone:

Support zones.

Gauge Increase:

Gauge increase better than a trap cap.
Gauge increase best.
Gauge increase fairer to all areas and easier to enforce. Lobster seasonality: August - October lobsters come in from offshore.

Fishing Zones:

With zones, if more restrictive regulations up north, it would force effort south.

License Moratorium:

Moratorium is good - keep it.

Participating NMFS Staff:

Bob Ross, Tom Meyer, Ingo Fleming.

Known Federal, state, and local government officials or their representatives:

None

Known Media Coverage:

None
The meeting was tape recorded, 1 cassette tape.

LOBSTER DEIS PUBLIC HEARING - SUMMARY OF COMMENTS

TOTAL ATTENDANCE: 9
NUMBER SPEAKERS: 6

NUMBER OF SPEAKERS DISCUSSING SPECIFIC COMMENTS BELOW.

4	No support for a trap cap.
3	increase the carapace gauge size
3	Allow a lobster bycatch in the Black Sea Bass fishery
1	Support a trap cap.
1	Support Fishing Zones
1	Continue License Moratorium
1	No support for a Trap Tag program.

B. Written Comments

1. Comment: Two U.S. Senators, the Atlantic States Marine Fisheries Commission, four state fishery agencies, one Maine state senator, six fishing industry associations, and twenty three individuals felt the National Marine Fisheries Service should adopt a plan and regulations that are consistent and complementary with the Atlantic States Marine Fisheries Commission Plan.

Response: NMFS agrees. The proposed regulations are designed to be compatible with the effective implementation of the Commission's Amendment No. 3 to the American Lobster Interstate Fishery Management Plan (ISFMP) and also consistent with the national standards set forth in section 301 of the Magnuson-Stevens Act, in accordance with ACFCMA.

2. Comment: one state fishery agency, one fishing industry association, and four individuals do not believe that American lobsters are overfished.

Response: NMFS disagrees. The most recent NMFS assessment of the lobster stock concluded that it is overfished throughout its range (22nd Northeast Regional Stock Assessment Workshop Document 96-13, dated September 1996).

3. Comment: Four individuals felt no further management measures are necessary.

Response: NMFS disagrees. Amendment No.3 of the Commission's American lobster ISFMP acknowledges that the American lobster resource is overfished and requires additional management measures to increase egg production in the American lobster population throughout its range. NMFS agrees with the provisions of Amendment No. 3.

4. Comment: Three state fishery agencies, three fishing industry associations, and fourteen individuals felt NMFS did not comply with National Standard #2 by not using the best available science when drafting the Environmental Impact Statement.

Response: NMFS disagrees. See response to comment 2. The Commission, in consultation with NMFS has scheduled a peer review to update the stock assessment of American lobster during summer 1999. NMFS will continue consultation with the Commission, to formulate management actions on the basis of the best available scientific information.

5. Comment: Three fishing industry associations, and seven individuals felt NMFS did not have accurate statistics on landings, number of traps fished, and other statistical data to adequately assess the current status of the lobster fishery.

Response: The conclusion that American lobster is overfished is based upon the best available scientific information, as required by the ACFCMA. NMFS agrees, however, that statistics on landings and fishing effort should be improved to better characterize the resource and the lobster fishery, for example, through mandatory reporting at the vessel and dealer level on a trip by trip basis. The associated requirements for such a program to monitor the eventual success of fishery management measures are being developed under the auspices of the state/federal Atlantic Coastal Cooperative Statistics Program (ACCSP).

6. Comment: One Senator, one state fishery agency, one environmental group, and eight individuals felt NMFS should increase the sea sampling program by vessels using trap gear.

Response: NMFS agrees that the sea sampling program should be enhanced, and will share this responsibility with the Commission and the states through ACCSP deliberations.

7. Comment: One state fishery agency, four fishing industry associations, two environmental groups, and seven individuals supported a moratorium on new entrants in the Federal lobster fishery until lobster was no longer overfished.

Response: The proposed regulations extend the moratorium on new entrants in the lobster fishery in Federal waters.

8.Comment: Nine individuals felt Federal limited access lobster licenses held by license holders, who have not harvested lobsters recently within a predetermined time period, should lose their ability to renew the inactive or latent permit; basically, a "use it or lose it" approach to permit renewal.

Response: Six of the seven lobster management areas identified in the Commissions ISFMP for American lobster include waters under both state and Federal jurisdiction. Accordingly, NMFS believes that management actions based upon a "use it or lose it" approach should be based upon peer and industry review through the Commission's adaptive management procedures. The Commission has scheduled public hearings for review of area plans during April-May 1999.

9. Comment: One state fishery agency, one fishing industry association, two environmental groups, and fifteen individuals support the coast wide implementation of a maximum carapace size limit, varying from 4-1/4 to 5-1/2 inches, for American lobster. Several of the commentors identified the benefit of maintaining a broodstock of large, prolific female egg bearing lobsters, which also have more viable and healthier eggs than lobsters at the current minimum legal size of 3-1/4 inches.

Response: The implementation of a 5-inch maximum size, as recommended in Amendment 3 of the Commission's ISFMP, will be implemented for the Area 1 (Gulf of Maine) lobster management area. The benefits of a maximum size regulation and the potential for implementation as an effective regulation in other lobster management areas would be enhanced at such time the abundance of (currently scarce) larger lobsters increases throughout the range of the fishery.

10. Comment: Two industry associations, and one individual opposed the coast wide implementation of a maximum carapace size limit of 5-inches for American lobster. One association objected, identifying the high percentage of larger lobsters its' members harvest and the adverse economic impact that a maximum gauge size would have on its' members. One association identified the need for "trophy lobsters" by its members and objected to implementation of a maximum carapace size limit restriction on the dive industry.

Response: NMFS does not propose a coast-wide implementation of a maximum carapace size limit.

11. Comment: the New England Fishery Management Council, one state fishery agency, and five individuals supported allocation of the lobster resource or harvest controls for all vessels holding a limited access American lobster permit based on variations of the following: exclusive area allocations to individual lobster fishermen; day-at-sea limits similar to the multispecies FMP, landing limits for all permit holders; or an individual annual poundage quota per vessel.

Response: NMFS believes that implementation of this management approach should be discussed and evaluated within the context of industry consensus and the Commission's adaptive management deliberations pertaining to the American lobster fishery in both state and Federal waters. Implementation of such an approach at this time for only Federal permit holders would be counter to the area management objectives of the ISFMP.

12. Comment: The New England Fishery Management Council, the Atlantic States Marine Fisheries Commission, most state fishery agencies, industry associations, environmental groups, and many individuals expressed general concern about the continuing buildup in the number of traps fished by individual fishermen and

the resulting increase in fishing effort on the lobster resource.

Response: Concern regarding increasing fishing effort in the American lobster fishery was noted in the Commission's ISFMP and the Federal DEIS. Measures will be implemented to cap fishing effort in both the nearshore and offshore EEZ. Further restrictions on fishing effort may be evaluated under the ISFMP provisions in future years in order to achieve stock rebuilding objectives for the American lobster resource.

13. Comment: Four environmental groups and twenty two individuals requested the National Marine Fisheries Service to do everything possible to end overfishing and rebuild lobster stocks as soon as possible.

Response: NMFS recognizes that action in the EEZ alone cannot end overfishing of American lobster and rebuild the resource throughout its range. Proposed changes in Federal lobster management are predicated upon a state-Federal partnership, in consultation with the American lobster industry on an area management basis, to achieve ISFMP objectives in a time frame to minimize the potential of a stock collapse of American lobster.

14.Comment: Two fishing industry associations, and fifteen individuals supported a ban on the harvest of American lobster by non-trap fishing gear (otter trawls, dredges, gillnets, diving).

Response: Proposed EEZ management measures continue a landing limit of 100 lobsters per day, up to a maximum of 500 lobsters per trip of five or more days using non-trap methods. Intensified restrictions on the non-trap fishing sector, which accounts for approximately 2.2% of total annual lobster landings, are not warranted at this time.

15. Comment: One industry association opposed the implementation of a ban on the harvest of lobster by non-trap gear (otter trawls, dredges, gillnets, divers), citing the adverse economic impact this measure would have on harvesters and businesses providing support services.

Response: See response to comment 14.

16. Comment: Three state fishery agencies, two fishing industry associations, and three individuals supported continuation of existing Federal landing limits of 100 lobsters per day and a maximum of 500 lobsters per trip of 5 days or more on the non-trap gear sector (otter trawl, dredge, gillnet, divers).

Response: NMFS agrees. See response to comment 14.

17. Comment: One state fishery agency and One industry association supported continuation of existing Federal landing limits of 100 lobsters per day and a maximum of 500 lobsters per trip of 5 days or more on the otter trawl sector and a limit of six lobsters per person for all other non-trap gear.

Response: Notwithstanding the limits on landing of lobsters by non-trap methods, there will continue to be a prohibition on the possession at any time of more than six lobsters per person when aboard a head, charter, or dive vessel.

18. Comment: Several individuals recommended various daily landing limit options for the non-trap sector including landing limits of 35, 50, and 75 lobsters per day and 500 lobsters per day or trip on the non-trap gear sector.

Response: NMFS recognizes the need to implement restrictions on all gear sectors and adopts the harvest limits on the non-trap gear sector as recommended under the ISFMP. See response to comment 14.

19. Comment: The U.S. Coast Guard, one state fishery agency, four fishing industry associations, two environmental groups, and eighteen individuals supported an increase in the minimum legal size for American lobster. Several proposals recommended gradual incremental carapace increases which were spread out over multiple years with the most support centered on four 1/16-inch increases over a five year period. NMFS Law Enforcement comments stated that a gauge increase could easily be enforced both at sea and dockside. Several

commentors felt that a gauge increase would provide the single most effective conservation benefit to the lobster resource of any identified management measure.

Response: NMFS agrees that an increase of the minimum legal size would provide one of the most effective management measures to achieve ISFMP stock-rebuilding objectives. The potential of achieving this benefit is being evaluated for several lobster management areas by peer review and deliberations among the respective lobster conservation management teams through the Commission's adaptive management procedures. Additional area management measures will be addressed through Commission public hearings during April-May, 1999. In response to recommendations contained in the ISFMP, NMFS has initiated consultations with the Canadian government concerning coordination of future gauge size increases in both U.S. and Canadian waters.

20. Comment: Four individuals supported an increase in the minimum legal size for American lobster only if Canada increases their minimum gauge size at the same time or prior to the United States.

Response: See response for comment 19.

21. Comment: Three individuals commented that the baited traps were providing food and habitat for sublegal lobsters and a reduction in the number of traps in the water may have a negative impact on the population.

Response: NMFS is aware of no peer-reviewed information which would support this hypothesis.

22. Comment: One state fishery agency, two fishing industry associations, two environmental groups, and thirteen individuals supported v-notching the tail section of egg bearing female lobsters throughout the range of the resource. Several commenters wanted the definition of what constitutes a v-notched lobster to match the more restrictive Maine regulations.

Response: Benefits associated with the mandatory V-notching of lobsters have been contentious. Federal regulations do not require V-notching, however, NMFS has accepted the ISFMP recommendation to continue the prohibition on the possession of V-notched female lobsters. The current definition of a V-notched lobster conforms with the Commission's definition. The NMFS is open to further refinement of this definition in consultation with the Commission.

23. Comment: One fishing industry association, and two individuals opposed v-notching the tail section of egg bearing female lobsters. Concerns were expressed involving an increased likelihood of bacterial infections to the cut tail flipper of v-notched lobsters and questionable conservation benefits of the practice.

Response: See response for comment 22.

24. Comment: The Atlantic States Marine Fisheries Commission, two state fishery agencies, four industry associations, three environmental groups, and six individuals stressed the need for regulations to be adaptable for each lobster management area, preferably through the use of industry Lobster Conservation Management Teams, to fit the needs and fishing patterns of the industry in each area.

Response: NMFS agrees. The implementation of EEZ regulations will be in accordance with the area management approach identified in the Commission's ISFMP.

25. Comment: One state fishery agency, three industry associations, and nine individuals oppose the use of a buffer zone, defined in the DEIS as a ten mile wide area extending from thirty to forty miles from shore where no traps are allowed to be set.

Response: The buffer zone has been removed from proposed Federal regulations.

26. Comment: Two state fishery agencies, the Atlantic States Marine Fisheries Commission, one fishing industry association, two environmental groups, and five individuals supported a buffer zone (defined in the DEIS as a ten mile wide area extending from thirty to forty miles from shore) if all fishing in the buffer zone is

completely prohibited, including a ban for the non-trap gear sector also.

Response: See response to comment 25. The concept of "no fishing" or closed areas is deferred to potential future consultations with the Commission and the lobster conservation management teams under the adaptive management provisions of the ISFMP.

27. Comment: The New England Fishery Management Council, the Atlantic States Marine Fisheries Commission, one state fishery agency, and two individuals support historic participation in seleced management areas.

Response: Historic participation in several lobster management areas was proposed by the respective lobster conservation management teams under the ISFMP. The Commission has scheduled hearings during April-May 1999 to receive public comments on this and other facets of management on an area by area basis. NMFS supports this industry-wide evaluation by the Commission on the merits of historical participation which will facilitate effective coordination between state and Federal management of American lobster throughout the range of the resource.

28. Comment: One environmental group, and fourteen individuals supported the use of historic participation and historic trap allocations when determining where a lobsterman is allowed to fish and how much trap gear an individual may have on the water at any one time.

Response: See response to comment 27.

29. Comment: One individual supported the use of allocating traps only for vessels which provided trap data to NMFS on the annual permit renewal application form as of the 1991 control date.

Response: The allocation of trap limits based upon previous fishing records is associated with potential management decisions based upon historical participation. See response to comment 27.

30. Comment: Two industry associations questioned the ability to determine historic participation and/or historic trap allocations since existing data to reliably determine historic participation is incomplete and fair and equitable allocations would be difficult to determine.

Response: This issue in accordance with proposals by lobster conservation management teams will be evaluated under the adaptive management provisions of the ISFMP. See comment 27.

31. Comment: Three individuals supported the use of allocating traps based on the size of the documented vessel holding a limited access permit. Recommendations varied from using a number between twenty six and thirty traps per foot of documented vessel boat length to an unspecified number to be determined. "Vessel size and size would be in proportion to how many traps they need to survive."

Response: Although NMFS acknowledges that there are many opinions on how to determine trap allocations, trap allocations for 1999-2000 are based upon the recommendations contained in Amendment 3 to the Commission's ISFMP. Under the provisions of the ISFMP, changes in trap allocations may be considered during future regulations to meet plan objectives during the stock rebuilding period.

32. Comment: Three individuals support a regulation requiring that the owner-operator must be present on board whenever the vessel is fishing.

Response: Such a regulation at this time has not been considered for management of American lobster, but may be evaluated, as appropriate, by lobster conservation management teams for future consideration in state and Federal waters.

33. Comment: The Atlantic States Marine Fisheries Commission, one state fishery agency, two fishing industry associations, one environmental group, and one individual specifically identified support for

implementing identical trap limits to those established by the Commission.

Response: NMFS is initially proposing EEZ-wide trap limits which are the same as those recommended by the Commission for certain lobster management areas in the ISFMP. Future changes in trap limits remain a possibility under the Plan's adaptive management provisions in accordance with the American lobster stock rebuilding objectives.

34. Comment: Eleven individuals supported a trap limit of 800 traps in the nearshore area and a trap limit of 2000 traps in the offshore area per vessel holding a Federal permit.

Response: NMFS will implement a trap limit of 1000 traps in 1999 and 800 traps in the year 2000 for the nearshore EEZ. In the offshore EEZ (Area 3), these limits are 2000 and 1800 for 1999 and 2000, respectively. Future changes in trap limits are possible in order to achieve American lobster stock rebuilding objectives.

35. Comment: The Atlantic States Marine Fisheries Commission, one state fishery agency, one fishing industry association, and thirteen individuals opposed reducing down to 480 traps the maximum number of traps allowed per permit holder in the nearshore area. Commenters identified the adverse economic impact on their business and the health and safety risks of such a low trap limit by forcing lobstermen to fish in poor weather and without a stern man.

Response: See response to comment 34.

36. Comment: Two state fishery agencies, and six individuals did not support the use of trap limits as a means to end overfishing of lobsters. Commenters indicated that trap limits would be too difficult to enforce. Many other management options were identified, including carapace size increases, vent increases, closed area, and pending LCMT recommendations as preferable to trap limits.

Response: NMFS agrees that a trap limit by itself, will not end overfishing. However, there is wide-spread consensus that a trap limit is needed to curtail increasing fishing effort and associated fishing mortality on American lobster. Trap limits are already enforced in state waters of Maine and Massachusetts. The implementation of additional management measures such as those mentioned, will be required in both state and Federal waters to end overfishing and rebuild the stocks of American lobster.

37. Comment: One individual wrote in support of implementing maximum size limits on lobster traps as specified in the Commission's ISFMP Amendment #3.

Response: this management measure has been incorporated into the proposed Federal regulations.

38. Comment: The U.S. Coast Guard, one state fishery agency, and four individuals expressed concerns about the feasibility from implementing a trap tag program for Federal permit holders, especially given the difficulty of at-sea enforcement.

Response: Enforcement of a trap tag program has been a topic of concern and discussion throughout the development of the ISFMP. A Commission law enforcement committee, comprised of state and Federal law enforcement representatives, is addressing how best to effectively enforce trap tag programs, given the importance of this management measure in reducing lobster fishing mortality and achieving ISFMP stock rebuilding objectives for American lobster.

39. Comment: One state fishery agency, two fishing industry associations, and four individuals supported the implementation of a trap tag program to enforce proposed trap limits on Federal permit holders.

Response: A trap tag program has been incorporated into the proposed Federal regulations.

40. Comment: One environmental group, and five individuals felt the current moratorium on the issuance of new permits in Federal waters should be ended. Commenters supported allowing new permits for individuals

who have completed an apprentice program, including requirements for unspecified education credits and time requirements for actual experience on board a lobster vessel.

Response: See response to comment 7.

41. Comment: Two individuals suggested the current moratorium on the issuance of new permits in Federal waters could be revised to allow the issuance of a certain percentage of new permits based on the number of returned/retired licenses each fishing year.

Response: NMFS believes that this would be counter to the objectives of the moratorium on new entrants into the EEZ fishery and the ISFMP goals during the American lobster stock rebuilding period.

42. Comment: One state fishery agency, two fishing industry associations, two environmental groups, and ten individuals supported increasing the minimum size of required rectangular escape vents. A complementary circular vent size increase providing equivalent conservation was also supported.

Response: Proposed regulations include an increase in the minimum size for both rectangular and circular escape vents.

43. Comment: One individual asked NMFS to provide the industry, and the LCMT's with a list of the conservation equivalencies for various effort reduction options for use as alternative management measures in place of trap reductions.

Response: The ability to provide this information is being addressed by state and NMFS scientists through discussions between the Commission's Lobster Technical Committee with the lobster conservation management teams under the ISFMP's adaptive management provisions.

44. Comment: Four individuals were concerned that increasingly restrictive regulations in other marine fisheries, especially the New England multispecies fishery, would result in a redirection of effort on to lobsters and an increase in effort on the resource.

Response: Fishing for lobster in the EEZ is limited to those who qualified and obtained a Federal lobster permit under the terms of a moratorium on new entrants which was implemented in 1994. The behavior of fishermen and associated fishing practices are difficult to predict. The resulting potential impacts when they occur can be addressed through the ISFMP's adaptive management provisions and adjustments to EEZ management measures.

45. Comment: The Atlantic States Marine Fisheries Commission, four state fishery agencies, three fishing industry associations, and two individuals questioned whether the biological benefits of trap limits and trap reductions were quantifiable as an effective management measure. Commenters stated that trap reductions do not equate on a one to one basis with a comparable reduction in fishing effort.

Response: NMFS agrees that trap limits and trap reductions are difficult to quantify due to such factors as gear efficiency and saturation, and changes in fishing practices. Nevertheless, the capping and/or reduction of fishing effort is an important step in reducing lobster fishing mortality to some threshold level which, when combined with other management measures, will contribute to achieving ISFMP objectives to end overfishing and rebuild stocks of American lobster.

46. Comment: One individual felt that the states should manage the lobster resource out to 30 miles from the shoreline.

Response: NMFS disagrees. Federal management of American lobster is governed by the jurisdictional provisions relating to the EEZ as defined in the Magnuson-Stevens Act.

47. Comment: Two fishing industry associations, two environmental groups, and two individuals

supported recommendations to implement some form of a mandatory reporting program, primarily citing the benefits of better statistical data on the health of the resource and industry. Commenters expressed the need for monthly reporting by fishers on a form designed for multiple trips on one form rather than one trip per form.

Response: NMFS agrees that mandatory reporting is important, but believes that reporting of lobster landings and sales should be consistent among state and Federal jurisdictions. The logistics and implementation of mandatory reporting for lobster is being addressed by the state/Federal Atlantic Coastal Cooperative Statistics Program (ACCSP).

48. Comment*:* One fishing industry association objected to requiring mandatory reporting for recreational vessels.

Response: Mandatory reporting as it relates to commercial and recreational fishing vessels is being addressed from a unified state and Federal perspective under the ACCSP.

49. Comment: One state fishery agency, and three individuals stated that nearshore and offshore fishermen should have the same number of traps. One commenter cited the potential increase in economic value of an offshore permit due to the higher trap allocation the offshore fishery.

Response: A higher trap limit is proposed for the offshore EEZ (Area 3 of the ISFMP) based upon the Commission's recommendations and the historical character and economics of that industry sector.

50. Comment: One state fishery agency, three fishing industry associations, and one individual supported the implementation of a prohibition on spearing lobsters.

Response: The proposed regulations prohibit the spearing of American lobster in the EEZ.

51. Comment: Eight individuals supported implementation of a management plan, or portions thereof, for the offshore area proposed by the Atlantic Offshore Lobstermen's Association (AOLA).

Response: The AOLA plan is one of several plans submitted by lobster conservation management teams under the Commission's ISFMP provisions. The Commission has scheduled hearings during April - May 1999 for public review of these management proposals. Since lobstermen throughout the range of the American lobster resource often fish in more than one management area and since the plans vary with respect to proposed regulatory measures (such as minimum lobster size, trap limits, and trap allocation procedures) these hearings will provide an essential mechanism to enable an integrated public and policy evaluation of a unified approach for lobster area management.

52. Comment: Three individuals did not support the implementation of the current version of the management plan for the offshore area proposed by the Atlantic Offshore Lobstermen's Association and specifically cited concerns over the historic participation and trap allocation provisions of the AOLA management plan.

Response: See response to comment 51.

53. Comment: Three individuals objected to the boundary line between the Area 1 and Area 3 lobster management areas which moved the line farther offshore from the Area 1/Area 3 boundary line identified by the New England Fishery Management Council and implemented in Amendment #5 to the Federal FMP compared to the Area 1/Area 3 boundary line approved under the Commission's ISFMP Amendment #3.

Response: NMFS has accepted the boundary lines recommended by the Commission and its member states under the ISFMP.

54. Comment: Four individuals supported the use of days off from fishing and seasonal closures to all lobster fishing as recommendations for management measures to end overfishing of lobster.

Response: These type of measures are possible for public review and consideration through deliberations of the lobster conservation management teams under the adaptive and area management provisions of the ISFMP.

55. Comment: The Environmental Protection Agency, one state fishery agency, one fishing industry association, three environmental groups, and one individual felt the DEIS did not adequately address the impact of habitat degradation and marine pollution on the lobster resource. Commenters identified concerns over: oceanic dumpsites for dredge spoils; contaminant issues such as dioxin, and PCB's in the marine environment; and sewage outfall and waste treatment concerns.

Response: These issues and other habitat concerns are addressed and identified in the ISFMP as anthropogenic impacts on lobsters and their habitat.

56. Comment: One state fishery agency expressed concerns that gear would concentrate at the boundary to the buffer zone and would create two lines of gear through which marine mammals would have to negotiate, thereby increasing entanglement risks.

Response: The buffer zone has been deleted from proposed Federal regulations.

57. Comment: Two state fishery agencies, and two individuals expressed concern about the potential concentration of non-trap or mobile gear in the buffer zone and the resulting negative impact on fish habitat.

Response: See response to comment 56.

58. Comment: Two state fishery agencies expressed concern that restrictive trap limits and trap reductions in Federal waters would result in a shift of effort to state waters with less restrictive regulations.

Response: The proposed trap limits and trap reductions in the proposed rule are similar to those recommended by the ISFMP. Additional reductions beyond the year 2000 have been deleted as a default measure in the proposed Federal regulations. There will be an annual adjustment of additional or different management measures for Federal waters which may include, but not be limited to, continued reductions in fishing effort, increases in minimum maximum size, closed areas, closed seasons and other management area-specific measures as may be recommended by the Commission to end overfishing and rebuild stocks of American lobster.

59. Comment: The New England Fishery Management Council, and one fishing industry association opposed the non-trap landing limits identified in the DEIS and stated that trip or possession limits not be implemented until the non-trap sector has caught 6% of the previous year's total catch.

Response: See response to comment 14. NMFS believes that continuation of the current landing limit on lobsters caught by non-trap methods, as recommended in the ISFMP, is warranted to protect the lobster resource and maintain catch by methods other than traps or pots at historical harvest levels.

60. Comment: The New England Fishery Management Council, one environmental group, and four individuals identified the need to prevent or reduce mortality on softshell lobsters and lobsters which have just molted or shed their shell.

Response: Although NMFS agrees that it is important to protect softshell lobster, no specific regulations for their protection are proposed at this time. Appropriate management measures can be addressed for both state and Federal waters through the ISFMP's adaptive management provisions.

61. Comment: Two state fishery agencies supported implementation of lobster management area lines in Federal waters as specified in the Commission's ISFMP Amendment #3.

Response: NMFS agrees and will implement this recommendation.

62. Comment: Two environmental groups, and six individuals expressed concern that the current trap limits proposed in the DEIS could actually result in an increase in the number of traps fished by allowing current permit holders fishing less than the proposed limits to increase their traps up to the proposed limit.

Response: Changes in fishing practices and behavior as a result of fishery regulations are difficult to predict. Nevertheless, NMFS believes that the benefits associated with trap limits outweigh the potential disadvantages associated with unknown future fishing behavior. See response to comment 45.

63. Comment: One state fishery agency and two individuals stated that proposed trap limits and escape vent regulations proposed for lobsters are unfair and cause undue financial hardship for Federal lobster permit holders who fish primarily for black sea bass.

Response: Based upon 1997 data, NMFS estimates that approximately 20 vessel owners possess both lobster and black sea bass Federal fishing permits. The proposed Federal regulations have been developed to minimize financial hardship on Federal permit holders, while initiating necessary additional management measures to achieve ISFMP objectives for rebuilding stocks of American lobster.

64. Comment: Three fishing industry associations, and eight individuals stated the need for an overlap area in Federal waters in the area defined as the Area 2/3 Overlap in the chart identified in the Commission's ISFMP Amendment #3.

Response: An Area 2/3 overlap region has been incorporated into proposed Federal regulations.

65. Comment: Two fishing industry associations, and four individuals supported U.S. efforts to open dialog with Canada on mechanisms to coordinate a minimum carapace size increase in both countries.

Response: NMFS has initiated communications with the Canadian government concerning coordination of future management actions in U.S. and Canadian waters, focusing on minimum size (gauge) increases in American lobster fisheries.

66. Comment: One individual stated that the DEIS did not adequately address the adverse economic impact on the industries which provide support services to the lobster industry such as boatyards, marinas, equipment suppliers and others.

Response: The proposed Federal regulations are not anticipated to have a significant impact on support services to the lobster industry.

67. Comment: One individual identified the need for a catastrophic loss or natural disaster provision which would allow for the reissuance of all tags or a waiver of the tag requirement for the duration of the year if the Federal government implements a trap tag program.

Response: The proposed Federal regulations include a provision for reissuance of lobster trap tags due to catastrophic loss.